MINISTRY OF OVERSEAS DEVELOPMENT

Report of the Higher Education Mission to the South Pacific appointed by agreement between the Governments of Britain and New Zealand with the co-operation of the Government of Australia

LONDON
HER MAJESTY'S STATIONERY OFFICE
1966

REPORT OF THE HIGHER EDUCATION MISSION TO THE SOUTH PACIFIC

MEMBERS

Sir Charles Morris, K.C.M.G. (*Chairman*)	Vice-Chairman of the Inter-University Council for Higher Education Overseas, London, and former Vice-Chancellor of the University of Leeds, Britain.
F. R. G. Aitken	Former Assistant Director of Education, New Zealand.
H. M. Collins, O.B.E. ...	Secretary, Council for Technical Education and Training for Overseas Countries, Britain.
P. W. Hughes	Deputy Director of Education, Tasmania, Australia.
D. H. Christie (*Secretary*) ...	Ministry of Overseas Development, Britain.

ACKNOWLEDGEMENTS

We wish to record our grateful thanks to H.E. the Governor of Fiji, H.E. the High Commissioner for the Western Pacific, Members of the Legislative Council in Fiji, and senior officials of no fewer than ten national, state, and territorial administrations for their great help and encouragement, for their generous hospitality, and for the time they freely gave to us. Thanks to the very wide interests in proposals for a University institution, a considerable range of organisations, firms and individuals showed no less keenness and helpfulness, and to these also we record our gratitude. Vice-Chancellors and other University people in Australia, New Zealand and Hawaii were more than willing to discuss the possibility of a sister institution in the South Pacific and gave us the benefit of their ideas and experience. In covering so much ground we inevitably encountered many other acts of kindness and we must be forgiven if any of those who were responsible have not been mentioned by name or office. To these as well as to the following we wish to record our great gratitude:—

Officials of the Government of Fiji and especially Mr. K. R. Bain and Mr. J. G. Rodger and their staffs;

The Prime Minister, the Minister of Education and officials of the Government of Western Samoa;

Officials of the British Solomon Islands Protectorate and especially Major Bovey (Chief Education Officer) and his staff;

Resident Commissioners, New Hebrides, and officials;

The Administrator and the Assistant Administrator, Territory of Papua and New Guinea, and officials, especially those of the Department of Education;

The Secretary-General, South Pacific Commission, Mr. W. D. Forsyth and Dr. R. Seddon;

The President of the University of Hawaii, Mr. T. Hamilton;

The Chancellor of the East-West Center, University of Hawaii, Mr. Howard P. Jones;

The Vice-Chancellor, Institute for Student Interchange, East-West Center, Dr. J. Hendrickson;

The Secretary for External Affairs, Mr. A. D. McIntosh, and officials of the New Zealand Government;

Officials of the Commonwealth Government of Australia in Canberra and Sydney;

The Director, the Assistant Director (Mr. Carswell) and other Officials of the N.S.W. Department of Technical Education;

The Commanding Officer, RNZAF Detachment, Laucala Bay;

Miss D. A. Long, Research Officer, TETOC.

Fiji was the focal point of our mission and its educational system and problems had a central bearing on our work. The officials of a number of its Government Departments and particularly the Education Department supplied us with much valuable material and the answers to almost endless questions. We are particularly grateful to Mr. K. R. Bain, Secretary for Social Services and our liaison officer with the Government of Fiji, who accompanied us on many of our journeyings and ministered to all our needs.

Last, and certainly not least, we are especially grateful to our Secretary, Mr. David Christie, who bore the brunt of a very heavy programme of discussion and drafting at Laucala Bay and had preceded this by a month of intensive travelling, in the course of which he suffered from most of the usual vicissitudes of air travel and more besides; also to his indefatigable assistants Mrs. B. J. Gurd, Mrs. K. M. Goodman and their other secretarial colleagues who worked for very long hours, in difficult conditions, to copy several times the not inconsiderable number of words our Report contains and to complete the whole work before we left Suva on the 19th December.

CONTENTS

		Paragraph	*Page*
CHAPTER I.	1. Introduction and terms of Reference ...	1	1
	2. Historical Background	2	1
	3. The Laucala Bay Base	7	3
	4. Composition of the Mission	9	3
	5. Itineraries	11	4
	6. Terms of Reference—Interpretation ...	13	4
	7. Submissions to the Mission	15	5
CHAPTER II.	THE PRESENT POSITION		
	1. Geographical and Economic Background	16	6
	2. The Educational Background	29	9
	(*a*) British Solomon Islands Protectorate	30	
	(*b*) Gilbert and Ellice Islands Colony...	31	
	(*c*) New Hebrides	32	
	(*d*) Cook Islands	33	
	(*e*) Niue	34	
	(*f*) Nauru	35	
	(*g*) Western Samoa	36	
	(*h*) Fiji	37	
	(*i*) Tonga	41	
	(*j*) American Samoa	42	
	3. Conclusion	43	13
	4. Post-Secondary Education	45	13
CHAPTER III.	MANPOWER REQUIREMENTS—SOUTH PACIFIC AREA		
	1. General Problem	47	15
	2. Definitions	49	15
	3. Manpower Base Level	52	16
	4. Estimated Future Requirements—1966–70	53	16
	5. The Problem of Supply	59	18
CHAPTER IV.	A UNIVERSITY OF THE SOUTH PACIFIC ...	64	20
CHAPTER V.	ASSOCIATED COLLEGES AND INSTITUTES		
	1. Associated Colleges and Institutes ...	79	23
	2. The Teachers' College	94	26
	3. Institute of Education	102	28
	4. Community Education Training Centre...	106	29
CHAPTER VI.	CONSTITUTION OF THE UNIVERSITY	108	30

		Paragraph	Page
CHAPTER VII.	THE LAUCALA BAY SITE		
	1. Suitability of the Site	115	32
	2. Availability of Students	129	33
	3. Development Plan	141	36
	4. Conclusion	155	37
CHAPTER VIII.	ENTRANCE REQUIREMENTS, A PRE-UNIVERSITY YEAR AND BURSARIES	156	39
CHAPTER IX.	SUBJECTS AND FACULTIES		
	1. Degree Studies	167	42
	2. Diplomas	179	43
	3. Extra-Mural Studies	180	44
	4. Academic Advisory Committee	184	45
	5. The Library	187	46
CHAPTER X.	RESEARCH	193	47
CHAPTER XI.	FINANCE		
	1. Capital Estimate, Stage I	207	50
	2. Recurrent Expenditure	210	50
CHAPTER XII.	THE NEXT STEPS	219	53
APPENDICES.	APPENDIX 1		65
	APPENDIX 2		57
	APPENDIX 3		62
	APPENDIX 4		68
	APPENDIX 5		70
	APPENDIX 6		71
	APPENDIX 7		83

CHAPTER I

INTRODUCTION

Following discussions in London in the middle of 1965 between representatives of the British and New Zealand Governments it was agreed that a joint Mission, to which the Australian Government should be invited to nominate a member, should be set up to enquire into the various suggestions which had been made in the past for the provision of higher education in the South Pacific. In October the Mission was appointed with the following terms of reference:—

1. To investigate the future higher education requirements of the South Pacific area (other than Papua/New Guinea), including the need for regional post-primary teacher training facilities;
2. To recommend the type and level of institutions to meet these needs and to suggest the best way of relating them to each other;
3. To examine the extent to which the RNZAF station site and installations at Laucala Bay could be used or adapted to provide the institutions recommended, and the costs thereof.

Historical Background

2. As a starting point for our enquiries about past ideas and proposals for higher education in the region we have taken the Derrick Report of 1950. The late Mr. R. A. Derrick, M.B.E., was appointed by the South Pacific Commission to prepare a comprehensive report on vocational training in the South Pacific, which would cover all the main island groups in the South Pacific Commission area and deal with existing training facilities and requirements which could not be met within the territories concerned. The Report proposed a complete structure of vocational training within the South Pacific region from primary to university stages. Although the establishment of a university college was regarded as a rather distant goal, it was emphasised that any central institution that might be established should have that end in view and should be planned accordingly.

3. This report was considered by a Special Committee of the Research Council of the South Pacific Commission in January 1951. Its advice to the Commission resulted in a visit by the late Dr. F. J. Harlow, who was called in to produce a detailed plan for the establishment and development of a central institution in Suva. Dr. Harlow, whose final report was produced in 1953, considered that it would be a mistake at that juncture to regard the proposed Central Institution as a University College in embryo: "to do so might well have the effect of obscuring from the outset the functions which our present Central Institution can best perform". He envisaged other similar centres in the Pacific, as the whole vast area had facilities for vocational education and training only at low levels. The problem of providing technological education at professional level and of establishing a University of the South Pacific should, he thought, be regarded as a separate issue.

4. The proposal to establish an initial centre in Fiji in order to provide a prototype and to assist Governments administering the respective Pacific Island Groups in local development needs was strongly endorsed in Dr. Harlow's report; the experience gained in the setting up of this would provide helpful guidance for similar developments elsewhere.

5. These proposals, in the end, came to nothing when in 1955 the South Pacific Commission decided not to proceed with the establishment of a Central Institution. Unofficial discussions however continued over the years on the need for the provision of centralised regional facilities for middle and higher education. In 1963, during a visit to the Pacific, Mr. H. Houghton, Deputy Educational Adviser in the (then) Department of Technical Co-operation in London, took the opportunity of having very full and informative discussions with several groups who had closely concerned themselves with such proposals. From these he concluded that the need for a clear statement of the intentions of the interested Governments was fairly urgent. At the Commonwealth Education Conference at Ottawa in 1964 further informal discussions took place between representatives of the British, New Zealand, Canadian and Australian Governments. Other informal discussions of the problem, and some more formal discussions bearing on some aspects of it, were held at the Second Regional Education Seminar of the South Pacific Commission at Noumea in August/September, 1964. Meanwhile, however, the New Zealand Government had appointed Mr. J. Box, District Senior Inspector of Schools at Auckland, to investigate and report on teacher training needs in the island territories of the South Pacific. A proposal that a training college for secondary teachers of Forms I to IV should be established was to be the central feature in the investigation in view of reports that recruitment of post elementary teachers would be likely to present serious difficulties in the future.

6. The major recommendations of the Box Report are as follows:—

"1. That a sub-regional Training College for teachers for Form I to Form IV classes should be established.
2. That this College should be sited at Suva.
3. That the course should be three years and the examination standard at entry that of New Zealand School Certificate.
4. That the New Zealand and Fiji Governments should be asked to give the necessary ground and buildings at Laucala Bay base.
5. That early discussions be held with the officers concerned with the United Nations Special Fund with the object of applying for Fund assistance.
6. That the Governments and administrations of the following territories be asked to co-operate in the establishment and operation of the College: Fiji, Western Samoa, Cook Islands, Tonga, Niue, Gilbert and Ellice Islands and Eastern Samoa."

Steps recommended were:—

"1. Copies of the report to be distributed to:—
   (a) The territorial Governments of Fiji, Niue, American Samoa, Cook Islands, and Gilbert and Ellice Groups.
   (b) The Governments of Tonga and Western Samoa.
   (c) The metropolitan Governments of the United Kingdom and United States of America.
   (d) The Government of Australia (to provide the opportunity for any indication of interest in sending students or making a financial contribution).
   (e) The South Pacific Commission.
   (f) The Regional representative of the United Nations Special Fund.
2. *If possible* the New Zealand Government should indicate its approval to the proposals (in broad principle), state its willingness to hand

over the required part of the Laucala Bay base, and indicate a date when the buildings would be available.

3. A conference should be called as early as possible after opportunity for study of this report. All of the proposed participating governments and the Government of New Zealand should be represented at the meeting which it is recommended should be held in Suva.
4. If general agreement is reached and if all preliminary negotiations are successful a suitable expert (preferably an experienced New Zealand educationalist) should be appointed to draft a detailed scheme. The expense of this work might be met from a United Nations source or from New Zealand Technical Assistance Funds.
5. The report furnished by the appointed expert should form the basis of a detailed inter-governmental agreement."

The Laucala Bay Base

7. The reference in our terms of reference and in the Box Report to Laucala Bay requires explanation. The Royal New Zealand Air Force established a flying boat base at Laucala Bay about 1942 on a site covering approximately 120 acres of land about half a mile from the sea, and about 19 acres of land adjacent to the sea. On the first are quarters, messes and administrative buildings, and on the second are the airport hangar, the hard-standing and the workshops and transport yard. After the end of the war in 1945, the Base in addition to playing its part in the defence of the South Pacific area, established a reputation of service to the community at large—though the tale of the mercy flights undertaken by the flying boats crewed by the Royal New Zealand Air Force, which continue to this day, still remains to be recorded in detail. The New Zealand Government, having decided to change from flying boats to land based aircraft for defence purposes, came to the conclusion that the best way of continuing this tradition of service to the whole area would be to allocate the buildings at the base, which represented a very considerable investment, to a purpose which would be of primary importance to the peoples of the region as a whole, namely, Education. The Governor of Fiji, on a visit to New Zealand early in 1965 discussed these plans with the New Zealand Government and stressed the desire of the Fiji Government that consideration should be given, in making future plans for the use of the base, not only to the proposals for a Secondary School Teachers' College but also to the aspirations of many in the area for an institution for the provision of other forms of higher education.

8. It was against the background of these representations that the discussions referred to in paragraph 1 above were held in London resulting in the appointment of the Mission. Although it was agreed that the Box proposals should not be mentioned specifically in its terms of reference as they had not been given a wide circulation, it was also agreed that the Mission should, as a matter of course, take them into full consideration in their deliberations.

Composition of the Mission

9. With regard to the composition of the Mission consideration was given to the advantages which would accrue from a wide representation of all those who might be thought to have an interest in the problem and its solution, for example the Governments of the United States and France, UNESCO, The South Pacific Commission and the East-West Center of the University of Hawaii. To be weighed against these advantages, however, was the fact that representatives from most of those Governments or organisations

would of necessity be operating at very large distances from their home bases and the difficulties which would arise in keeping such a Mission together for a considerable length of time. It was also thought that against the background of the Pacific scene, a large Mission might become unwieldy and that it would be faced with problems of travel and accommodation. It was therefore decided that the Mission should be composed of a British Chairman and one representative each of the New Zealand and Australian Governments with an additional representative from Britain with a special knowledge of technical and commercial education.

10. It was essential for the requirements of the New Zealand Government that a swift decision should be reached about the future of Laucala Bay Base and there was an equal urgency on the part of the Fiji Government because of certain existing plans for the extension of teacher training facilities. Another factor relevant to the timing of the Mission's report was the desirability of establishing as soon as possible a sound basis for the exploration of various possible sources of assistance from overseas. It was therefore decided as has been explained above, that the Mission should be of restricted size. At the same time steps were taken to inform the Governments of the United States of America and France of what was afoot, and the Chairman and the British Member made visits to Paris where they met officials of UNESCO and explained the objectives which it was hoped to attain. The Secretary and the Chairman also paid separate visits to the East-West Center in Honolulu and the University of Hawaii, and two Members accompanied by the Secretary visited the headquarters of the South Pacific Commission in Noumea for discussions with the Secretary-General and the Executive Officer for Social Development, calling at the same time on the Secretary-General for New Caledonia.

Itineraries

11. In addition to the visits mentioned in the previous paragraph three Members of the Mission and the Secretary visited Wellington where they had valuable discussions with the Secretary for External Affairs and officials of the Ministry of Defence, the Department of Education and the Department of Island Territories. The three Members also went to Sydney where they met officials of the Commonwealth Office of Education and the New South Wales Department of Technical Education and later they paid a visit to Papua and New Guinea. The object of this latter visit was to see what was being done in these territories as the outcome of the Currie Report (the Mission on Higher Education in Papua and New Guinea), to compare the conditions prevailing there with those in the Pacific Island territories, and to talk with those who were engaged in finding solutions to these problems. It was also considered to be important that any planning for the Island Territories should take account of what was proposed for Papua and New Guinea. The Members next visited the British Solomon Islands, where they were joined by the Secretary who had meanwhile visited the New Hebrides. The Solomons, by reason of their geographical situation, are in the position of being able to look both North-West to Papua and New Guinea and also South-East towards Fiji.

12. The Chairman also, in addition to visiting Honolulu as mentioned above, had consultations with the Australian and New Zealand Governments in Canberra and Wellington. Meanwhile two Members visited Western Samoa. The Mission's hope to visit Tonga would have been realised but for accidents of timing.

Terms of Reference

13. The terms of reference instruct the Mission to investigate the future higher education requirements of the South Pacific area (other than Papua and New Guinea). In pursuance of this we have considered the needs of Fiji; the territories of the Western Pacific High Commission (the British Solomon Islands Protectorate, the Gilbert and Ellice Islands Colony, and the New Hebrides so far as the British educational interests are concerned); Western Samoa and the Tokelau group and the Cook Islands and Niue. We have not visited Tonga or American Samoa, but we believe that some of our recommendations may be of interest to both as also to the American Trust Territory.

14. We have taken the term "Higher Education" to mean any type of academic or technical education which is undertaken by students at the post-secondary school level; and within the term post-secondary we have included education which in fact may or may not be taken within secondary schools and which is referred to as Sixth Form work. In the South Pacific, post-primary education is not simple to define. Primary school work extends at present in many cases up to the eighth year of education; but for our purposes we have interpreted post-primary teacher training facilities to mean facilities for training teachers for classes beyond the sixth year of education, including the Sixth Form where the teachers are normally University Honours Graduates. The meaning of the terms usually associated with the institutions which can be set up to meet these needs is discussed later in the Report.

Submissions to the Mission

15. We wish to express our gratitude to all those organisations and individuals who have made verbal or written submissions to the Mission. A list of these will be found in Appendix 1.

CHAPTER II

The Present Position

1. Geographical and Economic Background

16. As we have tried to show, there can be no precision about the catchment area from which any institution of higher education in Fiji could hope to draw, the main reason being a diversity of political affiliations, some of them involving the orientation of secondary education towards post-secondary institutions outside the region. The region with which we are directly concerned extends from about 155 degrees East to 155 degrees West, occupying 50 degrees of longitude; and from the Tropic of Capricorn to just North of the Equator, say 25 degrees of latitude; a vast sea area of 6 million square miles. The area of indirect interest extends even further afield—westwards to include Papua and New Guinea and north-westwards to Guam and The (American) Trust Territory of the Pacific Islands if it is considered that these have any place in our pattern, or we in theirs.

17. We have not considered it as part of our task to attempt any detailed economic survey of the region. We have naturally, however, studied closely the statistics and other information given to us or available in published sources about the principal products and industries contributing to the economic life of the various territories. We have a three-fold interest in these. First, we are interested in them because they provide an indication

of the level of social services, including education, which the territories might support from their own resources; we realise however that this is not necessarily a critical factor from our point of view, since we have been informed that some of the educational systems are supported to a greater extent from subsidies from the metropolitan countries than from local resources, and it is no part of our brief to consider levels of subsidy or aid to the educational systems at large. Secondly, we are interested because educational systems and institutions stimulate economic development just as they are in turn stimulated by it; recent products of secondary schools, some of them trained after leaving school in a range of professions and skills, are already affecting significantly the social, political and economic life of the societies from which they are drawn. Thirdly, the last of our terms of reference enjoins us to consider the desirability and the costs of using or adapting the Royal New Zealand Air Force Station site and installations at Laucala Bay; we cannot entirely dissociate the consideration of these costs from that of the total capital, and in turn of the total recurrent costs of any prospective institution, nor from consideration of the ability of the region to support this burden or a reasonable proportion of it from its own internal resources.

18. We see nothing comparable with the economic revolutions which transformed, for example, the educational scene in the Gold Coast when its production of cocoa and the world price soared together, or in Northern Rhodesia when the copper industry was opened up, or in the newly booming oil countries. In these countries education has reached a state of relative affluence as a direct and immediate consequence of rapid economic development. The main products of the Pacific groups are as diversified as their peoples; the most universal is the coconut palm, and the copra industry is the oldest and most valuable in the Pacific Islands as a whole. It is difficult to envisage any comparable boom in this industry in spite of the many different uses to which its product is put; but at least it appears that the price of copra is comparatively stable. Bananas and citrus fruits are exported from many of the islands: cocoa, coffee, rubber and tobacco have all been grown and exported from time to time though production of these is very variable.

19. Sugar production is the largest industry of Fiji and sugar its largest export: in 1964 the value of the main exports reached the following figures:—

	£F
Sugar	17,830,717
Copra (including coconut oil and coconut meal exports)	2,938,067
Gold	1,385,745
Silver	31,176

20. Phosphate is an important mineral product of the region but its extraction is confined to Ocean Island, in the Gilbert and Ellice Islands Colony, and Nauru which is under Australian administration. It is understood that bauxite and phosphate exist in some of the Fiji Islands but that it has yet to be proved whether their extraction can be commercially profitable. Manganese is also mined in Fiji but exports have recently fallen. Timber is extracted on a considerable scale in the Solomons and elsewhere. Prospecting for mineral ore sources is of course widespread, and it would be rash to assume that there would be no boom anywhere in the region. But a sober assessment of the present position must lead us to some measure of caution in hoping for any substantially healthy economic basis for educational development in the foreseeable future.

21. Communications, which are to some extent a function of economic development, are poor throughout the region. However, for some islands the weekly aeroplane carrying perhaps only eight or nine passengers has meant a minor revolution in terms of contacts—commercial, cultural and social—with the outside world, and the modest network of air services of 1965 contrasts with the almost complete lack of air communications of 1955. It would therefore, again, be rash to predict that the island groups would not be linked by fast and capacious services in 1975. We noted that air services were a factor in the orientation of thinking in the British Solomon Islands towards Fiji on the one hand and Papua-New Guinea on the other.

22. The peoples of the South Pacific area fall into three major ethnological groups: Polynesian in the east, Melanesian in the west, Micronesian in the Gilbert Islands and various small islands in the north. However there is no clear line of demarcation. There are isolated groups of Polynesians on outlying islands deep in the heart of Melanesia; and in Fiji, which occupies a fairly central position, there is a fusion of types as well as a large population of Indian race. There are wide differences of language and culture between different groups. It is early days yet in the development of formal education to generalise about particular aptitudes, strengths and weaknesses displayed by particular peoples: the skills of some derive from traditional necessities and opportunities, while the absence of such skills in others may be evidence of no more than the absence of opportunity. The racial background to our task is further complicated by the non-indigenous groups whom Europeans have been instrumental in importing, mainly during the nineteenth century, as additional labour to meet the needs of the region. The Germans brought Chinese into New Guinea; the British brought Indians into Fiji, and Chinese to Ocean Island and Nauru; the French brought Chinese into French Polynesia and Javanese and Indo-Chinese into New Caledonia and the New Hebrides. While still providing labour for the sugar industry in Fiji, the Indians have shown themselves adept in the professions and in commerce as shopkeepers, traders, clerical workers and artisans. Europeans and especially Australians have also imported themselves.

23. Without, for reasons already given, attempting to identify the exact territories whose populations constitute our catchment area, we give below the approximate area of all island groups in the wider region, and estimated populations in 1962:—

	Sq. Miles	*Population 1962*
Fiji	7,055	415,300
Gilbert and Ellice Is.	369	41,600
Nauru	9	3,750
British Solomon Islands Protectorate	12,000	129,250
Tonga	260	67,500
New Hebrides	5,700	59,600
New Caledonia	8,548	80,060
French Polynesia	1,544	84,000
Cook Is.	201	18,700
Niue Is.	100	4,860
Tokelau Is.	4	1,860
American Samoa	76	20,850
Western Samoa...	1,133	113,900
Trust Territory of the Pacific Islands	687	81,000
Guam	206	43,050
Papua and New Guinea	183,540	1,971,900

24. The population of Fiji had risen to 456,600 by the end of 1964, made up as follows: —

Fijians	189,169
Indians	228,176
Europeans	10,831
Part-Europeans	9,803
Chinese	5,635
Other Pacific races	12,986
Total	456,600

25. Omitting Papua and New Guinea and the other territories whose contributions of students as part of our catchment area would be exceptional rather than normal, we can summarise the position by saying that there seems to be in sight a population of roughly one million for the more limited region for which an institution of higher education in Fiji could conveniently cater, approximately half being the population of Fiji itself. Any much greater population than this can for language or political reasons, or for reasons of sheer distance, be discounted for our immediate practical purposes.

26. Political matters also lie outside the scope of our enquiry and comment, except in so far as they affect the disposition of particular territories to look towards Fiji as a possible place to meet their higher educational requirements. The British, French, Germans, Spanish, Americans, Australians and New Zealanders have all had a share in administering groups of islands, some having changed hands several times over the years. Since 1919 administrations have been in the hands of English-speaking people in the majority of island groups, but French is the language of French Polynesia and New Caledonia, and partially of the New Hebrides. Her Majesty's Government in the United Kingdom has a direct political responsibility for the administration of Fiji, which is shortly to make further progress towards internal self-government in accordance with the conclusions of the Fiji Constitutional Conference held in London in July/August 1965. Britain is also responsible for the territories of the Western Pacific High Commission: wholly for the British Solomon Islands Protectorate, and the Gilbert and Ellice Islands Colony and partially for the Condominium of the New Hebrides. Besides Papua and New Guinea, Australia administers the Trust territory of Nauru; France has responsibility for New Caledonia, French Polynesia and the Wallis and Futuna Islands; and (jointly with Britain) for the New Hebrides; New Zealand for the Cook Islands, Niue and Tokelau Islands; the United States of America for American Samoa, Guam and the Trust Territory of the Pacific Islands. Tonga is an independent constitutional monarchy, under the protection for certain purposes of the United Kingdom Government; and Western Samoa is an independent state having a Treaty of Friendship with New Zealand.

27. The administering powers have adopted widely different financial policies towards the fulfilment of their responsibilities and in particular towards developing systems of education. Subsidies from the New Zealand Government have enabled the Cook Islands and Niue to embark upon universal secondary education; the aim is to provide the same standard of schooling as that obtainable in New Zealand. The Australian Government's policy towards Papua and New Guinea is not of direct relevance, but it is stated in the Report of the Currie Commission on Higher Education in Papua and New Guinea that Australia must be prepared to provide most of the money

needed for educational as well as other developments in Papua and New Guinea for many years. The main United Kingdom instrument of aid has been grants under the Colonial Development and Welfare Acts, intended as pump-priming injections rather than as subsidies.

28. Against this social and political background, it is not surprising that the educational systems are highly variegated and that few generalisations are possible. With notable exceptions, it can be said that secondary schooling is available only to small minorities and lacks money and teachers, and in some cases boys and girls ready to benefit from it. It is not within our terms of reference to suggest how two of these deficiencies are to be met, but any recommendations we may make in carrying out our brief to investigate the need for facilities to train secondary teachers must clearly have regard to realities. In general, no facilities exist anywhere in the region for such training; except for graduate teachers there is no really suitable course available overseas, and the need is relatively new. The history of education until recent years has been mainly a history of missionary endeavour. Only recently in several territories, have governments set out to fill the gaps at the primary level and proceed to the provision of one or two secondary schools. The great majority of secondary teachers so far are expatriate missionaries and teachers in the service of governments, mostly drawn from New Zealand, Australia, the United Kingdom, France and the United States. To these must be added the small numbers of indigenous teachers who have either graduated or been trained as teachers in those countries.

2. Educational Background

29. The general position of secondary education in the territories with which we are directly concerned is set out in the following paragraphs:

(a) *British Solomon Islands Protectorate*

30. The first secondary class was established in 1958, and by 1962 there was a full secondary school, King George VI School. Numbers on the roll rose from 32 boys in 1959 to 106 in 1964; these included 17 boys from the New Hebrides and 2 from Ocean Island.

School Certificate Results 1962–64

	Sat	*Gained S.C.*	*Failed*
1962 (1st year any candidates sat)	9	3	6
1963	14	8	6
1964	12	4	8
	35	15	20

Of the 15 who gained School Certificates, only 5 gained a Grade I or Grade II Certificate. Among these were 3 boys from the New Hebrides. In recent years Colonial Development and Welfare grants have been used to send girls overseas for secondary education and further training, and boys for Sixth Form work and higher education to New Zealand and Australia; also boys for artisan training to New Guinea and Fiji. In 1964 there were 4 non-government secondary schools for classes up to Form II only, as a first stage; 104 boys and 20 girls were enrolled; this being the first time that girls had attended secondary classes within the Protectorate. King George VI School will re-open at Kukum in fine new buildings early in 1966; it will become a co-educational secondary school, with a double-stream entry, and will accommodate 240 boys and 240 girls. The first girls will join the school in 1967. Proposals to extend the School Certificate course from 4 to 5 years have been under consideration, as well as the introduction of a Sixth Form course in 1967.

(b) *Gilbert and Ellice Islands Colony*

31. By 1964 there were 2 Government and 2 aided secondary schools with a total enrolment of 326 (191 boys and 135 girls); the comparative figures for 1959 were 119 boys and 28 girls. King George V School entered 21 boys for the Cambridge Overseas School Certificate and for the General Certificate of Education in 1964; this school has recently become co-educational and girls are being transferred there at the Form IV level when they have passed their Colony Form III examination at the Elaine Bernacchi School. It is not likely that there will be an increase in the number of pupils sitting for School Certificate in 1965 but the numbers should be doubled in 1966 when the girls reach this level. A Colony Form III examination was introduced in 1963 for all secondary school pupils who had completed Form III. 60 pupils sat for this examination in 1963, 52 of whom obtained certificates. By 1963 only 3 boys had gained School Certificates; in 1964, 2 boys obtained School Certificates and 1 qualified for General Certificate of Education; in addition there were 15 subject passes at G.C.E. "O" level and 40 at School Certificate level.

(c) *New Hebrides (British Administration)*

32. The British Administration has had the policy since 1959 of awarding scholarships to selected students for secondary education overseas, up to 5 places annually being available for boys in King George VI Secondary School in the British Solomon Islands Protectorate, where they can take School Certificate, and two places for girls in schools in New Zealand. Altogether, there were 31 boys and girls pursuing courses of secondary education in the British Solomon Islands, New Zealand and Australia in 1964. The Administration is developing secondary education in the territory and an academic secondary school will open in 1966. This may at a later date be enlarged to include courses of a more practical nature. In the meantime several voluntary agency schools have been experimenting with post-primary classes.

(d) *Cook Islands*

33. There has been a tendency to seek all forms of post-primary education overseas, mainly in New Zealand; scholarship schemes encourage this, although secondary education has been developing within the territory. Now, since 1964, universal secondary education is provided in the Cook Islands, the aim being to provide the same standard of schooling as that obtainable in New Zealand. Tereora College at Rarotonga, established in 1954, was until 1963 the only secondary school; in that year 35 pupils sat and 11 gained the New Zealand School Certificate. In addition to the academic stream there is a 2-year general, or rural course. Since 1963 three junior high schools teaching up to Form IV level have been opened; the best pupils from these schools go to Tereora College. It is expected that the roll of 90 pupils in the Fifth Form in 1964 will increase to 240 by 1966. Allowing also for the fact that in the past scholars were sent to New Zealand at the Form III level and that these will now stay in Rarotonga, it appears that it may become difficult to place all those who pass School Certificate in New Zealand Sixth Forms.

(e) *Niue*

34. Secondary Education is now available to all. Most secondary school children attend Niue High School, which came into existence in 1956 and has been teaching up to Form V since 1961; in 1965 there are 91 boys and 99 girls on the roll and it is expected that this school will reach School Certificate level in 1967 or 1968.

(f) *Nauru*

35. Schooling up to lower secondary level (Intermediate Certificate of the University of Melbourne) is provided, and a system of scholarships and bursaries provides secondary education beyond this level overseas, mainly in Australia.

(g) *Western Samoa*

36. In 1964 87 per cent of the 6–13 age group were in primary schools, representing a total of approximately 27,000. About one-third of the top classes went on to intermediate schools and about one-third of the pupils in Form II were being selected for a full secondary education. At the post-primary level about 830 pupils were attending Government and 1,000 attending Mission schools, but many do not proceed beyond Form III or Form IV. In 1964 approximately 500 were in Form V or above, but of these only 36 were in Form VI, including several on scholarships in New Zealand. Up to recent years the normal level of entry to the public service, including that for nurses and teacher trainees, was from Form II; this is now, in general, from Form IV. At Samoa College, the largest Government secondary school (which is co-educational and has 649 pupils), and a few of the Mission schools, the work of the more able pupils is geared to the New Zealand School Certificate. Some pupils in these schools study shorthand, typing, book-keeping and commercial practice. Samoa College has had its own Form VI (one year) since 1963; before this, students who gained the New Zealand School Certificate were awarded scholarships for further education in New Zealand. Now students who complete the Samoa College Form VI course satisfactorily qualify for the Endorsed School Certificate (New Zealand) and also take the New Zealand University Entrance Examination. Some mission school pupils transfer to Samoa College while others stay on and enrol for Form VI work with the New Zealand Correspondence School.

(h) *Fiji*

37. Academic Secondary Schools provide a two year course leading to the Fiji Junior Certificate Examination, and most of them a further two year course to the Cambridge or New Zealand School Certificate. A few provide a further 1-year course to the New Zealand University Entrance examination, while two provide a 1-year post-University Entrance course for which no external examination is taken.

38. Enrolment in academic secondary schools in 1963 was as follows :—

Schools	*No. of Schools*	*Enrolment*		
		M	*F*	*Total*
Government...	6	720	333	1,053
Aided	13	1,322	984	2,306
Unaided	24	1,898	1,121	3,019
TOTAL	43	3,940	2,438	6,378

This constituted an increase of 21 per cent over the 1960 roll.

39. A further increase is shown in the enrolments for 1964 and 1965 as follows:—

Schools	*1964* *No. of Schools*	*M.*	*Enrolment* *F.*	*Total*
Government	6	719	366	1,085
Aided	13	1,390	1,121	2,511
Unaided	24	2,115	1,314	3,429
TOTAL ...	43	4,224	2,801	7,025

Schools	*1965* *No. of Schools*	*M.*	*Enrolment* *F.*	*Total*
Government	6	722	367	1,089
Aided	13	1,474	1,240	2,714
Unaided	26	2,363	1,400	3,763
TOTAL ...	45	4,559	3,007	7,566

School Certificate results for 1960–64 were as follows:—

School Certificate Results for Both Examinations

1960–64

Year	*Exam.*	*No. of Candidates*	*No. of Passes* *Div. I*	 *Div. II*	 *Div. III*	*Total*	*Pass Rate*
1960	C.S.C. ...	488	32	82	147	261	53·4%
	N.Z.S.C. ...	87	—	—	—	53	60·9%
	TOTAL ...	575	—	—	—	314	54·6%
1961	C.S.C. ...	413	22	83	100	205	49·6%
	N.Z.S.C. ...	86	—	—	—	42	48·8%
	TOTAL ...	499	—	—	—	247	49·5%
1962	C.S.C. ...	438	25	74	111	210	47·9%
	N.Z.S.C. ...	82	—	—	—	53	64·6%
	TOTAL ...	520	—	—	—	263	50·5%
1963	C.S.C. ...	539	32	135	176	343	63·6%
	N.Z.S.C. ...	91	—	—	—	44	48·3%
	TOTAL ...	630	—	—	—	387	61·4%
1964	C.S.C. ...	552	40	136	190	366	66·3%
	N.Z.S.C. ...	170	—	—	—	127	70·5%
	TOTAL ...	722	—	—	—	493	68·3%

40. Students are admitted to Lower Sixth if their School Certificate performance indicates that they are capable of work at this higher level; this is usually indicated by a Division I or II pass in the Cambridge School Certificate, with at least a "credit" pass in English Language; or alternatively by a New Zealand School Certificate. These pupils normally take the New Zealand University Entrance examination at the end of one year; 8 schools provide for this, and together in 1965 had a roll of 113 boys and 48 girls. Two schools run a multi-racial Upper Sixth Form, one of them co-educational; the purpose is partly to raise the academic level of the students but mainly to provide a gradual introduction to university methods of study. The total roll of the two forms in 1965 was 29.

(i) *Tonga*

41. Education is compulsory for all children between the ages of 6 and 14; this does not cover any of the post-primary stages and less than half the students who pass through the primary schools proceed to secondary schools. The churches play an important part in education, especially at the secondary level. Enrolment in secondary schools in 1964 was:—

Government schools	608
Church schools	3,729
	4,337

Pupils work for a Tongan lower leaving certificate and higher leaving certificate. The lower leaving certificate is taken after a four-year secondary course and the higher two years after the lower but with an age limit of 20. In 1964 534 pupils sat for the lower, and 162 for the higher. In addition, four schools prepared pupils for the New Zealand School Certificate; full details are not available but from Tonga High School 20 sat for the examination in 1964 and 17 passed.

(j) *American Samoa*

42. Education is compulsory between the ages of 7 and 15. In 1962 a new high school was opened and there is now provision for all those eligible for admission.

3. **Conclusion**

43. These details of secondary education in the territories do not of course constitute the whole picture. A considerable number of boys and girls are sent overseas by governments or missions or proceed at their own expense for secondary education. It is difficult to assess the merits and demerits for pupils from the South Pacific of overseas secondary education compared with secondary education in the pupils' own countries. On the one hand it can be said that secondary education in, e.g. New Zealand, is tailored best to New Zealand requirements for post-secondary education; on the other hand we have received much evidence of social maladjustment among island students to life in the overseas countries, and of doubtful relevance in some of the courses and teaching.

44. Within the island region, the picture is one of substantial development of secondary education, both planned and in progress. We heard evidence of Missions in course of extending beginnings of secondary education to a full course, though sometimes delayed by lack of money. We saw in the British Solomon Islands the brand new buildings for the King George VI School, designed to accommodate 480 students in 1969 as compared with the much smaller numbers enrolled in the present school, located until this month at Auki. All concerned with these developments, whether on the Mission or government side, were concerned with the future supply of teachers for the prospective increases in the provision of secondary forms; few however were able to quantify their requirements.

4. **Post-Secondary Education**

45. A summary of all facilities for post-secondary education and training in the region is contained in Appendix 2. This summary is further summarised in the following paragraph.

46. Most of the post-secondary education and training listed is provided by departments of governments to meet their own special purposes, and much of it may well be better left under the same departmental auspices; few of the courses listed follow upon a full or nearly full secondary course; most do not therefore qualify to be included in the definition of "higher education" which we have adopted. The most significant higher education course is undoubtedly the 5-year course at the Fiji School of Medicine of which a full description appears at Appendix 3. Also significant are the 3-year diploma course at the Fiji School of Agriculture; the proposed course at the new Agricultural College in process of being established in Western Samoa; and the highest level (post-School Certificate) courses at the Derrick Technical Institute in Fiji. There are also to be courses of degree and diploma types at the new Pacific Theological College, which is now being built at Suva. As we have elsewhere observed there is no college in the region for the training of non-graduate secondary school teachers. Information about post-secondary education pursued by island students overseas is set out in Appendix 4.

CHAPTER III

MANPOWER REQUIREMENTS—SOUTH PACIFIC AREA

1. General Problem

47. The development of any territory depends not only on natural resources but on the provision of trained manpower to produce and market the resources, and to administer the territory. In this instance however we have not one territory but several to consider—Fiji; the territories of the Western Pacific High Commission (the British Solomon Islands, the Gilbert and Ellice Islands, and the New Hebrides); also Western Samoa, the Tokelau Group, the Cook Islands and Niue, Tonga, and American Samoa, in so far as they may look to a regional institution to help meet their requirements. In these several territories, which are themselves divided into further separate geographical entities, there are close on a million people living under differing political systems and with different social environments, but their general situations bear sufficient similarity to allow some degree of common consideration. Further, such common consideration is forced by another factor, namely that the individual sizes would not permit the provision of facilities to satisfy their training requirements but, taken as a region, some degree of self-sufficiency may be possible.

48. Only in Fiji, of the territories mentioned, has anything approaching a manpower survey been carried out. The task here can only be to assess the present position and future needs up to 1970 in very approximate terms, remembering that in many cases figures are not available and, in others, the bases of calculation adopted are open to considerable variations.

2. Definitions

49. In considering "High Level Manpower" we are concerned with the more advanced skills which are essential to the advancement of an economy. It may be defined in two terms:—

(*a*) the types of occupations concerned;

(*b*) the levels of attainment required to fill the occupations.

It is advisable to look at both these classifications since the relationship between them is one that changes with the development of a society, but it may be useful to indicate the broad limits of the relationship.

50. One possible categorisation is as follows:—

	Category	*Examples*	*Educational Requirements*
I	Professional Administrative	Senior civil servants, directors, doctors, graduate teachers.	Univ. graduate or equivalent.
II	Technical Executive	Executive civil servants, principals of small businesses, non-graduate teachers.	Form IV+1–3 years.
III	Skilled	Clerical officers, supervisors, salesmen.	Form II + 1–5 years.

51. The Fiji Manpower Survey was in different terms, using:—

(1) School Certificate

(2) Graduates

and listing these in terms of particular sections of the Government Sector and the Non-Government Sector. Since the only available information is in this form, it will be followed here.

3. Manpower Base Level, 1965

52. The paper, Preliminary Survey Higher Level Manpower Requirements in Fiji, issued by the Central Planning Office, November 1965, gives the following base figures for 1965:—

TABLE 1

1965 Base Figures for Fiji

	Government	*Non-Government*	*Total*
Graduates (Arts)	252	82	334
Graduates (Science)	194	216	410
Total Graduates	446	298	744
School Certificates—Administrative	1,285	1,606	2,891
School Certificates—Technical*	4,582	1,343	5,925
Total Certificates	5,867	2,949	8,816
Grand Totals	6,313	3,247	9,560

* Includes school teachers.

Thus, in rough terms, the Government sector employed at these levels in 1965 1·4 per cent of the total population, and those so employed are twice the number employed in the non-Government sector. It is of interest to compare this with the figures given by the Currie Report (Report of the Commission on Higher Education in Papua and New Guinea (page 20)), for Papua–New Guinea, where the Public Service employed in 1964 just over 20,000 or 1 per cent of the population. In Papua–New Guinea 2·5 per cent of the Public Service have degrees, in comparison with 7 per cent in Fiji.

4. Estimated Future Requirements, 1966–1970

53. In estimating future requirements two types of factor must be considered. The first factor is the proportionate increase of "stock", using the base level 1965, and this has been termed in the Fiji Survey, "Additional Net Requirements". The planning paper, against a background of a 3 per cent population increase and an estimated economic growth rate of 4·5–5·6 per cent used the estimates for percentage growth given in Table 2.

TABLE 2

Estimated Net Requirements Annual Growth Rate: Fiji, 1966–1970

Graduates	7·5 per cent
School Certificates	5·8 per cent.

54. This, however, is not the whole picture, since the second factor to be considered is the extra requirements to allow for replacement: replacement for resignations, deaths, etc., and replacement through a policy of localisation. Table 3 gives both sets of figures.

TABLE 3

Estimated Annual Growth Rates: Fiji, 1966–1970

	Net Requirements (%)	*Gross Requirements* (%)
Graduates	7·5	10·3
School Certificates	5·8	7·8

The figures in Table 3 assume that about 20 per cent of the existing expatriates will be replaced by 1970 and that replacement due to resignation, etc., would be at 2 per cent per annum. Both of these assumptions are modest ones and thus the estimated annual growth rates are unlikely to be overestimated.

55. The results from these assumptions are shown in Table 4.

TABLE 4

Fiji Manpower Requirements 1966–1970

	Situation 1965			*Additional Gross Requirements 1966–1970*		
	Govt.	*Non-Govt.*	*Total*	*Govt.*	*Non-Govt.*	*Total*
Graduates (Arts)...	252	82	334	162	23	185
Graduates (Science)	194	216	410	158	130	288
Total Graduates	446	298	744	320	153	473
School Certificates (Admin.) ...	1,285	1,606	2,891	582	932	1,514
School Certificates (Tech.)	4,582	1,343	5,925	1,913	613	2,526
Total Certificates	5,867	2,949	8,816	2,495	1,545	4,040
Grand Total ...	6,313	3,247	9,560	2,815	1,698	4,513

If this eventuated there would then be a total of 9,128 Government employees and 4,945 non-Government. The Government employees would be approximately 1·8 per cent of the population. In the Papua–New Guinea Survey an expansion of the Public Service to 3 per cent of the total population was envisaged. The figures may not be entirely comparable but the degree of expansion for Fiji could hardly be excessive.

56. In terms of prediction for the requirement of graduates for particular years, the Fiji paper's estimates are given in Table 5.

TABLE 5

Numbers of Graduates Required, Fiji, 1970–79

Gross Annual Additions

1970	110
1971	118
1972	127
1973	136
1974	147
1975	158
1976	170
1977	182
1978	196
1979	211

57. When it comes to extending these predictions to other territories, the situation is more difficult since the same preliminary work has not been done and the assumptions used for Fiji may be less valid elsewhere. To enable a rough order of magnitude to be estimated, however, a multiplier of 1·6 has been used below though we have no hard statistical basis for this procedure.

TABLE 6

South Pacific Manpower Requirements—Estimates for 1970–79

Gross Additions

	School Certificates	*Graduates*
1970	1,460	176
1971	1,546	189
1972	1,635	203
1973	1,730	218
1974	1,830	235
1975	1,938	251
1976	2,050	272
1977	2,168	291
1978	2,294	314
1979	2,427	338

58. Desirable as it may be to sub-divide these requirements into more specific categories this has not been attempted here. The further such a subdivision goes, the less reliable is the estimate since the numbers are relatively small and are therefore strongly affected by even small absolute variations such as are inevitable.

5. The Problem of Supply

59. Can these requirements be met?

60. So far as graduates are concerned, no figures are available to us to show what has been the actual gross or net addition to the stock of graduates in the Region in recent years. Most of the graduates who come into employment in the Region are no doubt still expatriates, and the number who come

from the Southern Pacific Islands is still a small proportion. It is safe to say that by 1979 a much larger proportion of the total number required will have to have graduated as students from the islands, and in due course probably nearly all of them. It also seems to us to be all but certain that, if the necessary number are to be forthcoming, nearly all of these will have to graduate from a South Pacific university institution.

61. When we come to consider the holders of School Certificates, we must bear in mind that the numbers for these include

(*a*) those who go straight into employment immediately after passing School Certificate and receive no further training.

(*b*) those who, whether before or after they enter employment, receive further college or institute training of high level, but short of becoming graduates, and

(*c*) those who belong to the categories in between the two extremes of (*a*) and (*b*).

It seems clear that at the present time a considerable number, perhaps a majority of those who hold posts which require further sub-graduate training beyond School Certificate have received that training without benefit of courses at colleges or institutes; that is to say, they have received their training within industry or commerce, or inside professional or government offices. In the future without any doubt a whole battery of courses at educational institutions will be needed at various levels to provide the necessary supply of high and middle level manpower which is necessary to the welfare of the countries.

62. In particular, a large number will be required at the diploma level.

63. It is obvious that no institution that could be devised could possibly aim at supplying precisely and exactly all the very various needs of highly qualified manpower which the future of the region will in actual fact demand but it is clear that there is an educational and institutional problem here which urgently needs to be attacked.

CHAPTER IV

A UNIVERSITY OF THE SOUTH PACIFIC

64. We have been asked to recommend what kind and level of institution is required to meet the higher education needs of the Region, and we have unanimously come to the firm opinion that what is needed is a fully autonomous university, comprehending within itself, as well as Faculties of Arts and Science, the Fiji School of Medicine, the School of Agriculture in Fiji, a college for the education and training of secondary teachers, the Pacific Theological College and, so far as its activities in the field of diploma courses are concerned, the Derrick Technical Institute. Accordingly we recommend that steps be taken as soon as possible to establish such a university, to be called the University of the South Pacific.

65. In our conception of such a university we have in our minds two main principles, both of which we hold to be of cardinal importance. The first is that in the whole field of higher education, whether in degree courses or diploma courses, the highest quality must be ensured in teaching and in student achievement. The second is that all courses of instruction, both for degrees and for diplomas, must be so designed as to take well into account both the interests and aptitudes of the students of the Region and also the circumstances and needs of the countries concerned. A third principle, of

hardly less importance, is that there must be a satisfactory machinery for channelling individual students into the right courses, and the right kinds of education and training, to suit their own abilities and interests and to meet the needs of the Region.

66. It was suggested to us at the outset of our enquiry that what is required for the immediate necessities of the day is some kind of junior college, which could provide teaching for diplomas and for some degree work up to the end of the first or second year, the remaining part of the degree courses to be completed, by a specially negotiated arrangement, after transfer to one or more universities overseas. We recognise that there are weighty reasons which can be adduced in support of such a suggestion. But on balance this proposal does not commend itself to us as a good solution to the problem of the Region. A division of this kind in a student's undergraduate courses would not in our view work out at all satisfactorily for the individual student's education; a college which was so staffed and equipped as to satisfy the overseas university, which would complete the course and award its own degree, could just as well provide the later part of the course as well and complete the student's instruction for his degree; and most important of all, the arrangement of work contemplated would offend, seriously in our view, against the second of our main principles, since the structures and methods of the student courses would necessarily be designed to suit the overseas country, and not to suit the students and needs of the South Pacific communities.

67. One reason, without doubt, why the idea of a junior college has attracted many of its supporters, arises from the fear that a new university would be unable to establish and safeguard in the eyes of the university and professional world at large the credit of its degrees. The countries of the South Pacific would not be satisfied, and ought not to be satisfied, with university degrees which do not command a proper esteem. But if the proper steps are taken, this fear need not be seriously entertained. A great many new universities have been founded in the Commonwealth in the last twenty years; and the evidence shows quite clearly that it has been possible for them, if they take the necessary care, to secure a proper rating for their degrees in the eyes of the great universities of the world, and of the great professions. The estimation in which the degrees of a university are held depends, almost regardless of its comparative youth or venerability, upon the quality of its professors and other academic staff, the length and structure of its student courses, and the repute which its examining or grading system enjoys for integrity and effectiveness. All these matters can with good forethought be well taken care of in a new University.

68. The first consideration is of course paramount. All universities are primarily judged by the quality of their academic staffs. There is no reason in our judgment why, with good salaries and free conditions for teaching and research, the University of the South Pacific should not attract its share of distinguished professors and of younger teachers of very high promise. On the second point, excellent courses can with good advice certainly be designed and brought into operation to suit the students and the needs of the Region. And lastly the examining and grading system can be reliably guaranteed on the basis of a well-conceived use of external examiners from overseas universities, especially if some special machinery, such as we recommend elsewhere in the Report, is added in the first few years to keep under review, and guarantee, the integrity and efficiency of the examination and teaching arrangements.

69. We are entirely satisfied, as we have previously said, that it is quite practicable for the University with sufficient care to establish and safeguard a good standing for its degrees.

70. Quite as important as the quality of the education offered is the suitability of the structure of the course of study and the methods of teaching. It is today an axiom of educational philosophy that it is not possible to produce good courses for one culture or region by taking courses from another culture or region and progressively adapting them. It is necessary, and it is of cardinal importance, to recognise and to conform to the *principles* of teaching and study which underlie all really good educational arrangements; but in applying these principles in consideration of the circumstances and needs of a particular culture or country, it is necessary to start afresh and base the new educational plan on a groundwork study of those circumstances and needs. If this is not done there will be serious imperfections in the instruction provided and in all probability a considerable wastage of students. A great deal of the well-known and serious difficulties experienced by students who go overseas at the undergraduate age is educationally quite unnecessary. The courses of the foreign institution are not well suited to follow upon their previous scholarly and social education in their own country, or to arouse and sustain their interest. Nor are the prescribed teaching and studies adapted to prepare the students for the work of their subsequent careers in their own countries. This may well be one reason why so many of the young men and women concerned wish to stay and work, if they can, in the countries where they have received their training.

71. It is still not sufficiently realised how thoroughly the same principles apply to education and training at the diploma level. The *standards* required for diplomas must within narrow limits be the same in all countries. But the structure of the systems of instruction and study must be so planned as to fit in with the methods and achievements of the secondary schools concerned, and also to suit the basic level of knowledgeability and insight which the pupil acquires from family and social life and from the local media of mass information. We wish to lay strong emphasis on the great value of the contribution which the University will be able to make to the quality and effectiveness of the whole higher education of the Region, if it takes responsibility for securing the careful planning and subsequent review of all degree and diploma courses and methods of instruction.

72. It may, we know, seem at first sight surprising to some people, in consideration of the past practice of so many older universities, that we recommend that the University of the South Pacific should concern itself with diploma work at all. But, as will now be seen, we think that the reasons for its doing so are entirely compelling. The case of the Fiji School of Medicine clearly speaks for itself. Its education work is becoming a little more advanced and comprehensive with every year that passes; and, as we have said elsewhere in this Report, no one can doubt that in due time, and at the appropriate time for the circumstances and needs of the Region, it will become a full professional and graduate school of medicine. And when that times comes, it will have a distinguished character all its own, just *because* it has grown in its own rhythm with the growth and development of the Region.

73. The case for the close association of the proposed Secondary Teachers' College with the University is also very clear. In the United Kingdom, as well as in Australia and New Zealand and elsewhere in the Commonwealth, the teachers' colleges are today being brought more and more closely into the universities. And the reasons are obvious enough. There is

no field in which research and analytic studies of principles, in regard both to fundamental concepts and to the influence and importance of more special circumstances, advantages and disabilities, can have a more valuable and effective influence on day-to-day practice than in the field of teaching. The university "Institute" or "School" of Education, with its family of associated Teachers' Colleges, is one of the discoveries of the contemporary world. In the course of time, and at its own place, the new University will reach out towards a progressive association with the primary teachers' colleges in the various countries of the Region. In the meantime it has a direct and valuable offering to make, as we have out-lined elsewhere, to the projected Regional Secondary Teachers' College for the Region.

74. The Pacific Theological College is a new institution; but it is already clear from its programme of work and development that it will derive great benefit from association with the University and would itself have a distinctive contribution to make to the life and work of the wider institution.

75. To the diplomas of the School of Agriculture and of the Derrick Technical Institute the main principle, upon which we have insisted above, fully applies. A great opportunity is offered to them and to the University to plan, and to review from time to time, well designed diploma courses which are both first-class educationally and also really and entirely suitable to the South Pacific countries. The present state of study of courses of this kind, and of their almost constant adaptation and development in the leading countries of the Commonwealth makes the present a very good time. Furthermore it would clearly not be economically justifiable for the Region to have two separate institutions, calling in many fields of study for a duplication of very expensive buildings and equipment as well as of some highly distinguished staff. We have spoken elsewhere in the Report of some of the difficulties which have frequently been experienced in the past in regard to the association of universities with sub-degree diploma work. But we feel assured that at the present time a bold and successful approach to the problems involved is entirely practicable, and that the establishment of a University of the kind that we recommend would be extremely rewarding.

76. The last, but not the least, of the arguments which have weighed with us in coming to our conclusion is the striking need in the Region for a flourishing centre of Research. No large community can afford to do without its share of learned men and active enquirers in the pursuit of new knowledge. They are of great value to a modern government and to very many other vital activities in the life and work of a progressive country. Indeed it is well known that, in the circumstances of today, professors and other university scholars and teachers are called upon for so many specific outside tasks, both in their own countries and in the world at large, that universities are finding it difficult to spare them to give as much service outside their academic walls as is really desirable.

77. Those who research in different fields can, and in great universities do, encourage, stimulate and even directly assist one another. The boundaries within the field of human knowledge are breaking down, and no enquirer, however specialised, can afford to be isolated from his fellows who are working in the great central areas of scientific research and scholarship. Moreover, a university as a centre of research inevitably attracts research workers, for longer or shorter visits or periods of work, from other parts of the world. Indeed the great universities, and the international bodies which endow research, and which might well initiate and sponsor

enquiries in various fields in the South Pacific, will in general not go ahead with the actual realisation of projects of this kind unless there is a university for them to deal with.

78. As we have said, there is in our opinion no reason why the University of the South Pacific should not have a very distinguished future.

CHAPTER V

ASSOCIATED COLLEGES AND INSTITUTES

1. Associated Colleges and Institutes

79. Many—perhaps the majority—of the universities of the Commonwealth have associated, connected or affiliated colleges or institutions which are not themselves of a university nature. In some cases these colleges provide facilities for study for degrees and/or diplomas of the university with which they are associated. There are also university institutions which conduct courses leading to other awards, e.g. certificates or diplomas, in addition to degree courses. These are perhaps more common in the U.S.A. than in the Commonwealth.

80. In considering the provision of post-secondary education in the South Pacific region, we are on almost virgin ground, with no university institution, no college for training secondary school teachers, and only two or three colleges, the most notable being the Fiji School of Medicine, that do clearly post-secondary work. We have therefore found it open to us to propose a pattern of provision which we believe will combine great educational advantage with economy of expenditure, given willingness on the part of the authorities of the existing colleges to vest their interests in such a pattern.

81. The main characteristic of our pattern is a number of vertical tracks parallel for most of their length but with two or three variations in level at their tops or bottoms. Generally speaking, those with the highest tops represent degree courses, and those that do not go so high, diploma courses. Another feature is the provision of links facilitating transfer from one track to another. In the case of our proposals most of the degree tracks are located in the University proper and most of the diploma tracks are in the associated colleges; but the pattern makes allowance for degree courses in the colleges and diploma courses in the University. In a field of study where there is a degree course but no diploma course, or vice versa, the missing track can be thought of as a dotted line, to be filled in at some time in the future, or never. We regard this pattern as educationally better and more economical than one consisting of a monolithic university and several unconnected colleges, each with its own unrelated set of tracks.

82. Once the concept of an autonomous university is accepted, there are certain implications for the colleges which are to associate with it. It is clearly important that each college in its own field should be able to use its special knowledge and experience in framing the content of its courses. A Teachers' College, for instance, has a special interest in, and insight into, the professional skills involved in teaching children of particular ages. Similarly, a technical institute will have its own expertise in imparting particular professional and vocational skills. A university, on the other hand, is concerned to ensure basic standards in the teaching of the fundamental aspects, and in general the academic elements, in each particular course; and here it is clearly a matter of principle that authority must rest with the university. It must therefore itself accept ultimate responsibility for course

design and it will itself issue the diplomas and degrees. The necessary relationship between university and college could best be operated through the representation of the University Council by three or four of its members on the Board of Governors of the college concerned, and by suitable cross-representation on relevant boards and committees.

83. There would also be implications for the staffing, student facilities and accommodation of the associated colleges. It would be necessary to devise a scheme whereby teachers engaged on courses leading to diplomas or degrees of the university were recognised as teachers of the university; this could extend to teachers engaged partly on university courses and partly on other courses as a result of special arrangements in individual cases. Students pursuing diploma courses whether at the university or at the associated colleges would all be university students in the full sense, enjoying equal rights with degree students to use all facilities such as students' union and university library.

84. There are also important financial implications. In general, we suggest that these be approached in the first place in a way which will cause the minimum dislocation of existing arrangements. The Fiji School of Medicine, for example, is already on a regional basis and could fulfil the role we envisage for it under existing arrangements until such time as a more complete integration has become clearly desirable. The same may well apply to the Fiji School of Agriculture, which is not a regional institution, and in view of the existence of schools or colleges of agriculture in other territories, is not likely to operate in the first place as such. The Derrick Technical Institute at Suva need suffer no great disturbance of the diploma courses that are already running at the vesting date; when it is possible to admit students on an organised scale from elsewhere in the Region, or to introduce new diploma courses open to the Region, there would no doubt have to be a reconsideration of financial arrangements. Where the colleges already attract funds from outside sources care will have to be taken that these are not prejudiced; it may also be that the associated colleges as well as the University itself will attract further outside funds for special purposes involving degree or diploma courses, and it will be for the University and the college authorities to agree upon conditions of acceptance.

85. At least one of the associated colleges, the Derrick Technical Institute prepares students for diplomas and certificates of outside bodies, such as the New South Wales Department of Technical Education and the United Kingdom bodies administering overseas examinations equivalent to the U.K. National Certificates and Diplomas (i.e. in technical subjects the City and Guilds of London Institute, and in commercial subjects the Royal Society of Arts and the London Chamber of Commerce jointly). As a pragmatic measure, the University may, of course, use existing syllabuses and existing examinations as a preparation for its own diplomas as well as for the external awards until from time to time in the future it finds itself able to replace these with new courses of its own. We consider that eventual replacement consistent with the maintenance of standards should be the policy of the University and the Derrick Technical Institute authorities. One of the important considerations that has led us to recommend that the University should be autonomous and devise its own degree examinations—the consideration that only thus can it genuinely meet the educational needs of the Region—applies with equal cogency to syllabuses and examinations at the diploma level. Where syllabuses of external examining bodies are concerned with universal principles and practices requiring little or no modifica-

tion to suit Regional needs (like those in mechanical engineering) there will be less urgency about "cutting the painter"; nevertheless this should be the general objective.

86. It is at present envisaged, and we agree, that the University should take responsibility for the post-secondary courses being planned by the Derrick Technical Institute in such fields as:—

Applied Science or Chemistry
Architecture
Building and Civil Engineering
Mechanical and Electrical Engineering
Management (Industrial)
Work Study
Banking
Business Studies
Management (Commercial)
Public Administration

We understand that the two courses in engineering are in more immediate prospect than the rest, and may well be in operation before the University comes into being. Although it is not our intention in this report to deal with detail, it seems likely that some of the proposed courses could produce some overlapping (e.g. between the New South Wales syllabus in architecture and the United Kingdom building and civil engineering syllabus), and careful early planning will be required to see that, if existing external courses are used for the moment, these will accord with the general Regional needs and will dovetail together in a logical and economic fashion. Special thought will have to be given to courses in the last four of the fields listed, which are inter-related, and in accountancy which is not listed, perhaps because a part-time course is already provided. It may be that a broad foundation for business studies at the diploma level can be established and carried upwards in accountancy and banking to sub-professional and/or professional levels. Regard must be had to the requirements of relevant professional bodies for their membership; neither at degree nor diploma level should the requirements of external bodies be too dominant; but where the membership of professional institutions is desirable or even statutorily necessary for the practice of a profession, any educational authority would be doing a disservice to the individual and to the community if it did not respect, and so far as possible provide for, these requirements.

87. It is appropriate at this point to consider the position of Administration (for both business and public purposes) and Management as possible subject fields in which the University might conduct courses. We are not convinced that there is an immediate case for degree or diploma courses in these subjects; nevertheless we think it important that at least a contribution to the interests of management and administration should from the outset be made by the University. This will partly be achieved through some of the other diploma courses. For example, in both the engineering and the commercial courses there will be room for the teaching of supervisory techniques and of industrial and commercial organisation. In addition to this we have received indication throughout the Region that a need is felt for short courses for experienced people in both fields to meet requirements of governments and of commerce and industry. The University ought, in our opinion, to be the centre of such activities, perhaps through the Derrick Technical Institute. Courses of 12 or 6 weeks are the sort of thing we have in mind; well prepared courses of 2 or 3 weeks, or even 2 or 3 days, can serve valuable purposes and these will naturally be of special interest to

countries other than Fiji if they are organised, as they certainly should be, on a peripatetic basis. Teaching can be provided by teachers of other academic departments and by training officers and other specialist staff of firms and government.

88. We think that consideration should be given to at least one diploma course not listed by the Derrick Technical Institute or contemplated by associated colleges to which we have referred; namely, a diploma course in home and food science, likely to be of interest mainly to women and girls. Such a course would grow naturally out of some of the work of the South Pacific Commission's Community Education Training Centre at Suva, to which we make reference a little later. It should have particular strength on the side of food science, and of nutrition and dietetics. At some point the course might divide—one part especially relevant to the needs of the tourist industry should be designed for those who wish to specialise in catering and institutional management. On the home science side, there could be some common teaching with the training of specialist secondary teachers in this field.

89. The Fiji School of Medicine has served the South Pacific Region with distinction since 1886. A description of the school is included as Appendix 3. As we have already suggested, little initial change will be involved in its association with the University except its assimilation to the constitutional pattern we have proposed, from which it will flow that the Diplomas of Medicine and Surgery and of Dental Surgery of the Fiji School of Medicine will become Diplomas of the University. Consideration should in due course be given to the mounting of diplomas courses in some of the ancillary subjects.

90. We consider that a diploma course in applied science, or more particularly, in applied chemistry, could meet real needs in the Region, especially in relation to the processing of agricultural, fishery and diary products, and could be very economically mounted through the use of existing teachers and facilities both within the University and at the Derrick Technical Institute.

91. As regards the proposed Diploma in Agriculture, we recommend association with the University on the assumption that the objective of the Fiji School of Agriculture authorities to confine entry to holders of a school certificate or the equivalent will have been attained. We do not rule out the possibility that other colleges in the Region may run comparable diploma courses or that courses with particular specialisations may well become associated with the University in the same way. The agricultural college in process of being established, with the aid of the New Zealand Government and the Freedom from Hunger Campaign, at Alafua in Western Samoa, seemed to those of us who visited it to be a possible "candidate" for such association. In the agricultural field also it is important that co-operation in some active form should be developed with institutions in the broader region, such as Guam College, the University of Papua and New Guinea, and the University of Hawaii, so that the results of experiment and research can be quickly shared and there can be fruitful exchange of publications and perhaps of students and staff.

92. We have received a proposal for an association between the University and the Pacific Theological College which has been recently established and is being constructed quite close to Laucala Bay. As a result of a consultation in Suva in 1961 of people connected with theological education, detailed proposals for the founding and operating of the College were drawn up and a constitution was agreed upon. The constitution provides an ecumenical basis for the College, and the Pacific branches of most of the

main Christian Churches, other than the Roman Catholic, are at present participating bodies; other participants will be welcomed upon acceptance of the constitution. The College will have high entry standards, at least commensurate with those of the University; and it plans to run a course leading to a degree and another leading to a diploma. It hopes that these could be a degree and diploma of the University of the South Pacific. We believe that suitable constitutional and academic arrangements should be able to be arrived at for a form of association which would provide a broad basis of theological education, involving philosophical and social studies, the comparative study of cultures and religious and other studies. Some of these would be conducted within academic departments of the University concerned with other disciplines as well as theology; some would be within the Theological College.

93. We recommend that there should be discussions as early as possible between the College and the Vice-Chancellor, to determine the method of association which will be most suitable and convenient, both to the college, with its special commitments, and to the University, with its wider and more comprehensive academic responsibilities. No appointment should be made to any academic post in theology in the University until after these discussions.

2. The Teachers' College

94. We have referred in Chapter I to Mr. J. Box's investigation and report on teacher-training needs in the territories of the South Pacific, and to his major recommendations. We have also shown that his report came at a time when some of the governments concerned were evolving proposals for the establishment of a regional institution of higher education more comprehensive than a college confined to the training of teachers. We fully accept that provision for the education and training of non-graduate post primary teachers is the most serious deficiency of all in the scant post-secondary educational facilities in the Region. In the absence of any present provision within the Region, the needs are supplied either by sending students for overseas training, with the personal and professional disadvantages that have been referred to elsewhere, or by recruiting expatriates. There are therefore restrictions on the quantity and quality of the supply of secondary teachers which act as a brake on the badly needed expansion of secondary education. In a chain reaction this also depresses the quality of primary school teacher training so that improvement here is difficult too. A primary education which often fails to stimulate is followed by a secondary education which is limited both by inadequate preparation of the students and inadequate supply and training of the teachers. These are poor foundations on which to build a post-secondary structure of any kind, and unless a totally new element such as that proposed by Mr. Box is introduced into the situation, no improvement can be hoped for.

95. The need for non-graduate secondary school teachers is identified by most territories as attaching to the Forms I-IV area. It is true that Fiji at present deals with the equivalent of Forms I and II in the last two years of its eight-year primary school course; but it is understood that the intention is to readjust these arrangements and put the children in secondary schools after only six years in the primary. In general the need of the Region may be taken to be for teachers for Forms I-IV with an extension for a proportion of Form V teachers for some territories, including Fiji. This extended need might well be met by a training mainly designed for Forms I-IV, provided it is of high enough quality.

96. While accepting that the provision of an institution to meet this generalised need is an extremely high priority, we do not accept that it is the

only high priority. Nor do we accept that it should be met on quite the scale envisaged by Mr. Box, who estimated an initial intake of 84 students for his proposed secondary teachers' college. His figures make the assumption that all the territories he lists have an interest in co-operating in a regional institution, an assumption whose validity is open to doubt. His figure of 40 students for Fiji was considered by the Fiji Education Department to be a disproportionate take-off from the output of 400 School Certificate holders estimated for that particular year, having regard to other man-power needs including the need for primary teachers. Our decision to propose a University of the South Pacific will, of course, reinforce the other available opportunities and at the same time initiate a supplementary supply of secondary teachers at the graduate level.

97. In Chapter IV we gave it as our view that the case for the close association of the secondary teachers' college with the University was very strong; this reflected a growing awareness in the countries of the Commonwealth that there was no field in which the close association of academic study and research with day-to-day practice would have a more valuable and effective influence than in the field of teaching. We therefore have no hesitation at all in recommending that the association of a secondary teachers' college with the main teaching departments of the University should be a very intimate one.

98. We recommend that this College should be located on the Laucala Bay site, and that the student teachers should be both taught and accommodated in buildings of which some would be shared with or jointly used by degree course students, and others should be located near such accommodation but separate from it to meet particular needs of the teachers' college. We have included such provision in our suggestions for a development plan, and in our estimates of capital expenditure. As regards recurrent expenditure, we are hoping that some measure of assistance from overseas might be given to this particular kind of training, having regard to the priority which we believe to be accorded to it both by our Governments and by international agencies. We hope in particular that the United Nations Special Fund may be willing to consider a request for comprehensive aid, perhaps including the supply of some expert teachers.

99. The intimate form of association we propose between the University and the Teachers' College will make possible valuable economies in the use of space and of lecturing and teaching staff, and should at the same time lead to the enrichment of the quality of teacher training by making available some of the resources that will be provided primarily for the University's degree and diploma courses. The joint use of science laboratories is a most obvious economy. The presence either in the University or in the associated colleges of such courses as our proposed diploma course in home science will make available specialist teachers and facilities in another field. In other spheres too of specialist training—for example, in Physical Education, Art and Crafts, and Handicrafts—the possibilities are considerable.

100. We recommend that in the first year at least the Professor of Education in the University should be the Principal of the Teachers' College, which like the University is intended to be an institution for the Region. For the scale of teaching we have proposed the Principal will need to be supported by a full-time lecturing staff of either two or three in the first place, rising by 1971 to six or seven—this on the assumption that some of the needs for subject teaching will be met by other teachers of the University, including teachers in the Department or Institute of Education. The "core"

staff of the teachers college will be mainly concerned with teaching methods. It may be that part of this need for College lecturers could be met by UNESCO, and if so we think it important that they should be drawn from the English-speaking world. At least a proportion of the staff specifically appointed to the teachers' college should be full members of the university academic staff.

101. This close association with the University will have to be reflected in the constitution of the Teachers' College. The governing body of the College should include four members appointed by the University. In addition, there should be included representation not only of Fiji but of other territories in the Region that are major users of the College, and of the teaching profession.

3. Institute of Education

102. We turn now to the question of an Institute of Education, and in this connection we start by quoting a submission of the Fiji Education Department: —

> "*An Institute of Education:* Language-teaching problems, curriculum construction, the preparation and validation of attainment, aptitude and selection tests, audio-visual aids, and application of new teaching techniques, etc., are among the suggested functions of the proposed Institute. These functions, which would be carried out on a regional basis, are not very different from those suggested for the Educational Research Unit proposed in the Currie Report, or from those suggested for the Regional Institute of Education proposed in the Report of the South Pacific Commission's Second (1964) Regional Education Siminar."

103. We recommend that an Institute of Education should be established, and that it should interest itself in all these functions. In addition, it should be responsible for organising, in co-operation when suitable with the Secondary Teachers' College, whatever series of in-service and refresher courses for teachers of all kinds are shown to be needed. It should also consider valuable suggestions received from the now retired Director of Education, Western Samoa, concerning the need for an English Language Centre, for statistical services and for publications. Any functions of the Institute in connection with English Language should be carefully co-ordinated with the academic department concerned.

104. Such an Institute would inform and enrich the whole educational edifice throughout the Region, as well as giving a solid backing of experiment and research to the Secondary Teachers' College with which it will have the closest possible connection. A Director of the Institute should be among the first academic appointments.

105. There is the possibility of difficulty in the organisation of teaching practice, since the most accessible secondary schools—though no doubt some primary schools will be able to be used as well—will be in Fiji and indeed will not be mainly under the auspices of its Department of Education but under those of other agencies. It will need great goodwill on the part of the schools in Fiji, and especially those in the Suva area, to provide the maximum opportunities for this regional service. It is possible that improvements in air communications will make practicable on a wider scale the organisation of more teaching practice within the students' own countries

and under the supervision of their own authorities. Experience suggests that such an arrangement would call for some difficult feats of organisation but it may prove to be well worthwhile.

4. Community Education Training Centre

106. Finally, we have considered a proposal that the Community Education Training Centre, operated in Suva by the South Pacific Commission, should be taken under the wing of the University and included within the Education complex on the Laucala Bay site. We think that this should be done.

107. We have studied a paper submitted by the Training Centre, and members of the Mission have seen something of its work. It is clear to us that it has made and can continue to make a most valuable contribution to educational thought and practice in the Region, particularly through study of the processes of bringing knowledge and skills to the homes and social centres of the people instead of to the classroom. It constitutes an important link between formal and informal education and could have a strong social influence. It deserves in our opinion a place in the University organisation and on its campus ; the exact place in relation to the Institute of Education, the Department of Extra-Mural studies and the Secondary Teachers' College, will need of course to be carefully planned at every stage.

CHAPTER VI

CONSTITUTION OF THE UNIVERSITY

108. There should, in due course, be special legislation to determine the constitution of the University. We do not attempt in this Report to draft such legislation in any detail, but we emphasise some main points about the organisation of the University which we think of great importance.

109. The University should have the full autonomy and independence which is usual in universities of the Commonwealth. Its Visitor should be the Governor of Fiji, and there should be a Chancellor who will be Chairman of the Council, and also of the Court, and a Vice-Chancellor who will be the chief academic and executive officer of the University.

110. The Council should be the supreme governing body of the University, and should be constituted as follows :—

The Chancellor.

The Vice-Chancellor.

4 members appointed by the Governor of Fiji after consultation with the Executive Council.

4 members of the academic staff, of whom at least one shall be non-professorial.

4 members from the countries of the Region, other than Fiji, to be appointed by the Court.

4 academic members from overseas, one each from the Universities of the United Kingdom, Australia, New Zealand and the University of Hawaii.

Not more than 4 additional members to be co-opted by the Council.

The Director of Education for Fiji.

The Chief Education Officer for one of the countries of the Region other than Fiji.

111. The Senate should be the chief academic body of the University and, subject to review and approval by the Council, should have the control and general regulation of:—

(*a*) The instruction, education and research within the University.

(*b*) The instruction and education in such courses of study held in associated institutions as may be approved by the University for University awards.

(*c*) The conduct of examinations.

(*d*) The award of degrees, diplomas, certificates and other distinctions.

The Senate should have power to discuss any matter relating to the University and communicate its views to the Council.

112. It should consist of the professors and heads of departments, the principals of associated colleges and institutes, and other representatives of the academic staff; not less than a third of its members should be non-professorial. The Chairman of the Senate should be the Vice-Chancellor.

113. The Court should be a body substantially larger than the Council and should be widely representative of all the countries of the Region which are directly interested in the University. It should include members of the Council; members nominated by Governments; members representing the professions, industry and commerce in the region; at least 4 heads of colleges or other educational institutions; at least 2 headmasters and 2 headmistresses or other women engaged in the field of education; and some additional members, whose number should not be larger than one-fifth of the total membership, to be appointed by the Council of the University in consideration of their ability to contribute to the work and welfare of the University. The Court should meet not less than once in two years and should receive and discuss Reports from the Council and from the Vice-Chancellor; it should also be competent to discuss any matter which, in the judgment of the Chancellor, is of interest to the University and of which due notice has been given. The Court should have power to refer any resolutions it may wish for the consideration of the Council. The Chairman of the Court should be the Chancellor.

114. The Registrar of the University should be the Secretary of the Council, of the Senate and of the Court. He should be, under the Vice-Chancellor, the chief administrative officer of the University.

CHAPTER VII

The Laucala Bay Site

1. Suitability of the Site

115. The terms of reference for the Mission require it "to examine the extent to which the R.N.Z.A.F. station site and installations at Laucala Bay could be used or adapted to provide the institutions recommended, and the costs thereof". In dealing with this part of the enquiry the Mission had the services, as consultant, of Mr. R. M. Abel, a Sectional Architect of the Ministry of Works, Wellington, New Zealand, and the conclusions we have reached are based on his examination of the site and installation and his report on them.

116. The station site lies at the eastern apex of Suva Point, only 3 miles by road from the heart of Suva. The total area is 136 acres, divided into two separate units by Buckhurst Park, an important sports ground. The upper area, comprising 118 acres, lies on land sloping towards the south-east. This area is broken into a series of low ridges separated by shallow gullies. The surface is generally irregular but is well grassed and planted with various species of indigenous trees and shrubs. The whole area is very well maintained.

117. The lower area, which is only 18 acres, is adjacent to the sea and is almost completely flat.

118. The whole area is connected with the main Suva water supply and electric power, generally by underground reticulation. Fire hydrants are provided along the route of the 6″ water main. The station maintains its own fire tender and is also serviced by the Suva Brigade. The area is well serviced with sealed roads of good quality, generally about 24′ carriage-way and mainly kerbed and channelled. Surface water is collected and discharged into natural watercourses for which channelling is provided.

119. The position of the site appears to us to be well suited to educational purposes. It is an attractive area; it lies well to the prevailing winds; it is well drained and is within easy distance of Suva.

120. The area, although not large by world standards, appears to us, subject to certain reservations and suggestions, to be adequate for the purposes we have in mind and for the number of students likely to occupy it in the foreseeable future.

121. There are at least two areas of land lying adjacent to the Station site which should undoubtedly be reserved for future acquisition in order to provide for the proper expansion and development of the University. One is an area of some 20 acres on the upper boundary of the Station, and lying between it and Sukuna Road. It is heavily overgrown and has broken contours, but it could be developed for attractive additional housing and hostels. The second is an area between Buckhurst Park and the upper site, continuing down to Queen Elizabeth Drive. The area of about 20 acres would require filling, but it could be developed as an additional site for academic buildings. The use of this area may, however, involve the displacement of the present primary school.

122. There are also other possible extensions of the site to meet development needs in the more distant future, including some possibility of reclaimed land. We think this whole position should be urgently examined at the time when the University's Development Plan is being designed.

123. Before leaving this question of the site, there is one reservation we must make to the statement that it is eminently suited to the purposes we have in mind. We have been informed that even after the R.N.Z.A.F. has changed over completely to land-based aircraft it will require an area of land in Fiji for certain service installations and for living quarters for the men who will be in charge of them. It has been suggested that a certain portion of the upper area at Laucala Bay should be retained for this purpose.

124. We recommend strongly that any such installations should be sited elsewhere than at Laucala Bay. We are not competent to comment on the reasons influencing the R.N.Z.A.F. in its selection of a site, but if the educational institutions we have in mind are to develop in an orderly fashion in the Laucala Bay area, the whole site should be completely free of service installations. We go so far as to say that if a service unit, especially one which involves security problems, is to remain for all time, this would very greatly diminish the suitability of the whole University plan on this site.

Buildings

125. Scattered over the whole area there are about 210 buildings of varying size, age and type of construction. These include non-residential buildings, amenities buildings, houses and single men's quarters. Of these 75 are on the lower site and are almost without exception non-residential buildings. Of the remainder 100 are of a residential nature. The buildings vary in size from under 50 square feet of floor space to over 43,000 square feet.

126. The architect considers that the wooden buildings are generally approaching the end of their economic life, although he adds that provided sufficient money is allotted to maintenance they could be kept operative for a long time. All the concrete buildings are in good order.

127. The architect also gave much thought to the possible use of existing buildings for educational purposes. Apart from residential buildings and purely service buildings such as toilet blocks, telephone exchanges etc., he considers that there are about 64 buildings potentially useful for a limited period. These have a gross area of 146,000 square feet, which should convert for University purposes to a total net area of about 109,000 square feet.

128. Details of these matters may be found in the architect's report which is affixed as Appendix 6.

2. Availability of Students

Up to 1971

129. In any developing country it is difficult to make an accurate prediction of the number of future school leavers and of their destination. We find this exercise fraught with additional problems here for we are concerned with a regional institution or institutions. Not only are the various territories within the region at different stages of educational development, but also the degree of support likely to be given by each territory to a higher education complex in Fiji is not completely predictable.

130. Furthermore, statistics of the kind that could assist us in estimating possible student enrolments were not always available. It is apparent, however, that a majority of the students will come from Fiji itself both in the early years and in the future, and we were supplied with figures by the Director of Education, Fiji, which have enabled us to make an estimate of the numbers of Fiji students available for higher education.

131. To this estimate has been added a figure for students considered likely to come from other territories in the South Pacific Region.

Availability of School Students for Higher Education

	1967	*1968*	*1969*	*1970*
Leaving Fiji schools with U.E. or better	186	219	255	300
Of whom ⅓ are not likely to go to University	62	73	85	100
Leaving as possible students (Fiji)	124	146	170	200
Add figure for other territories ...	10	20	20	25
Add figure for entry from Preliminary year (see later) ...	0	0	20	25
Total	134	166	210	250

132. Taking 1968 as the first year of operation of the new institution, possible rolls in degree courses for the first four years of operation would thus be of the following order:—

	1968	*1969*	*1970*	*1971*
1st year	135	165	210	250
2nd year		90	110	135
3rd year			75	90
Repeats				25
Totals	135	255	395	500

N.B.—This allows for a wastage of 35% at the end of the first year, 15% at the end of the second year and 5% at the end of the third year.

133. The figure for "wastage" at the end of the first year includes allowance for transfers to overseas universities, etc. These figures include only those students who have gained a University Entrance qualification and will enter directly on the first year of a degree course. Our proposals, however, include the provision of a "preliminary" year for a certain number of pupils who have no more than the equivalent of a School Certificate pass. These should undertake a year's work in general subjects with an emphasis on English, at the end of which the university authorities will be in a position to determine those who should continue with a full degree; those who should go to the Secondary Teachers' College; those who should undertake a diploma course; and those for whom the institution held no suitable future.

134. It is difficult to assess the number of students likely to take this preliminary year, but it is expected that in the first few years the number will be quite small. It is possible, however, that territories such as the British Solomon Islands and Gilbert and Ellice Islands would make use of this course, in preference to establishing a Sixth Form for the small number of pupils they will have for a number of years at the post-School Certificate level. The numbers for this preliminary year may be assessed as:—

1968	*1969*	*1970*	*1971*
40	50	60	80

135. In addition the campus should provide accommodation for the Secondary Teachers' College which we are recommending (see Chapter V). It is proposed that the minimum entry to this course should be a pass in the School Certificate examinations, not all of course of those who pass this examination will be suitable, and it is possible that some pupils with a higher qualification may elect to take it rather than embark immediately on a full degree course.

136. Our enquiries have led us to the conclusion that, at least in the early years, the greatest support for the Secondary Teacher Training Course will come from Fiji and Western Samoa. There will probably be little demand at first from other territories but we are convinced that once it is established, in view of the greater awareness developing everywhere of the need for training at this level, the numbers will show a steady increase.

137. We do not believe that the first year's intake of students will exceed 50, but in the third year of operation (1970) the total roll is likely to be of the order of 170 students.

138. By 1971 this will bring the total roll of students pursuing their courses on the Laucala Bay site (i.e. excluding the students in the outlying Colleges and Institutes) to approximately 750.

After 1971

139. We have been supplied with figures to show, for the Fiji school system, secondary school output targets for 1966, 1970, 1974 and 1978 (see Appendix 5). We have used the figures for 1970, 1974 and 1978 to produce projections of student population on the campus in the years 1973, 1977 and 1981 following the procedure adopted in the preceding section of this Chapter.

	1970	*1974*	*1978*
Leaving Fiji schools with U.E. or better ...	300	470	653
Of whom ⅓ are not likely to go to the University of the South Pacific... ...	100	157	218
Leaving as possible students from Fiji ...	200	313	435
Add figure for other territories	25	40	60
Add figure for students who qualify from the preliminary year	25	47	70
Total	250	400	565

These should produce the following figures for the student population on the campus three years later:—

	1973	*1977*	*1981*	
Degree Course students ...	800	1,280	1,800	(i.e., totals for 1970, 1974, 1978 multiplied by 3⅕)
Add students in preliminary year	100	120	140	
Add Teachers' College students	200	225	250	
Total Student population on campus	1,100	1,625	2,190	

140. These projections show that plans for development ought to be so made as to allow for the University to grow in the fullness of time to 2,500 students or, perhaps better, 3,000. When this stage is reached—it will not be for many years but planning now must take careful account of it—some residential accommodation will have to be provided off the site. There might well be, as time goes on, some research or advanced study institutes on separate sites, but this kind of development could hardly be fully planned in advance unless a really vast site is found and chosen. Such a site could hardly be found without losing the advantages of proximity to Suva, and we think the balance of advantage lies in accepting the Laucala Bay site. Almost all universities have, as time goes on, some outlying institutes. We think, however, that the Development Plan for the Laucala Bay site should be based on an ultimate possible roll of 2,500 or, better, 3,000 students.

3. Development Plan

141. We now turn to consideration of a plan for the use of existing buildings and for the construction of new buildings as the student population builds up.

STAGE I

142. We have seen from Section 2 of this chapter that for the presumed opening of the University at the beginning of 1968 accommodation will be

required for a total of 220 students on the campus. This includes degree students, students doing the preliminary year, and students of the Teachers' College, but excludes from the calculation students of other associated colleges whose teaching and accommodation will be located elsewhere.

143. On the basis of the architect's findings we judge that these 220 students can be well accommodated in existing quarters of the RNZAF, with only minor modifications.

144. We likewise consider that all the teaching and administrative staff required at the beginning of the University's existence, whom we have calculated to be about 30 in number, can be accommodated in existing RNZAF houses, again with only minor modifications.

145. We are of opinion that in the first and second years classroom teaching can be carried out in adapted buildings. The main requirement which cannot be met by the adaptation of existing buildings is laboratories. We therefore consider that these should have the highest possible priority for construction and that sites should be earmarked for them as soon as the plan for a University is agreed upon, that they should be designed as soon as possible thereafter, and that construction should begin as soon as the sites can be made available, by the RNZAF, with a view to their being available for the opening of the University.

146. We consider that the same priority should be given to the siting, design and construction of the University Library, but it cannot necessarily be expected that this too will be ready for the opening. An existing building will have to be used temporarily.

147. A new students' union and new administrative buildings should be given the next highest priority. Their functions can be carried out in the first place in adapted buildings, but administrative efficiency and vital student activities will inevitably suffer if proper accommodation is not available by the beginning of the University's second year.

148. Plans must then be made for other buildings to be constructed progressively to accommodate the 750 students and 70 teaching staff who we estimate will be located on the campus at the beginning of 1971 (500 degree students, 80 preliminary year students and 170 training college students, see previous table in this Chapter).

149. The existing RNZAF quarters will not accommodate the whole of the student population beyond the end of the first year. It is also likely that about that time certain of the older wooden quarters will become unserviceable and that it would be more economic to demolish them than to repair them. It will be necessary at the same time to remove others to make way for permanent hostel accommodation. New hostel accommodation will need to be available for the beginning of the second year. We suggest that a hostel or hostels should be designed to accommodate 200 students, leaving an estimated 210 still accommodated in ex-Air Force quarters. By the beginning of the third year further hostel accommodation will be required for a further 200 students. This would leave 200 students in existing quarters, which we suggest should include all 130 training college students (for whom we envisage that separate arrangements on the campus would then be in process of being made) and 70 others.

150. We have carefully considered the question of accommodation for teaching staff and find it hard to assess how many will wish to live elsewhere than on the campus and what steps, if any, need be taken to assist them to do so. As a matter of guesswork rather than calculation, we think the 43 family-type houses available on the handing over of the complete site will accommodate as many staff as want to live in them for the first triennium,

assuming that a few of them can be converted into bachelor flats. For 1971 and following years the University will have to consider whether it should provide additional staff houses, whether on or off the campus.

151. During the course of this triennium all the buildings temporarily converted for teaching purposes will have to be taken progressively out of commission, some because of deterioration, others because they are not well suited for their purpose, and others because they will interfere with the planned construction of teaching buildings on that part of the site reserved for them. We envisage the complete replacement of old teaching buildings by new classrooms, laboratories, lecture theatres and ancillary rooms by the beginning of 1971.

LATER DEVELOPMENTS

152. By the late 1970's we envisage further development following an improved secondary school output and the introduction of new subjects, perhaps bringing the total student population to about 1,200. This would require hostels for 400 more students, a number of additional staff houses, and additional teaching accommodation pro rata. It would also require extensions to the students' union and library, which we suggest should be planned in the first place to meet the needs of a student population of about 1,000.

153. One important point we wish to emphasise. The University's Development Plan, which as we have mentioned elsewhere, needs to be designed at the earliest possible moment, should have two parts (i) a sketch development plan for the long period of full development, indicating a provisional reservation of sites for all essential parts of the plan; (ii) a more articulated development plan for sites and buildings for what we referred to as Phase I of the University's development.

154. Both these parts of the Plan will be needed if financial assistance from overseas is to be successfully sought.

4. Conclusion

155. We recommend

1. That steps be taken to secure the use of the Laucala Bay Station site for the University of the South Pacific.
2. That if at all possible the whole site should be rendered completely free of all service installations by an agreed date.
3. That steps be taken to reserve for the future use of the University certain additional pieces of land which border on the present Station site, viz.:—
   - (*a*) An area of some 20 acres on the upper boundary of the Station, and lying between it and Sukuna Road.
   - (*b*) About 20 acres between Buckhurst Park and the upper site, continuing down to Queen Elizabeth Drive.
4. That the aim should be (*a*) that the Secondary Teachers' College should open for students in the session 1968, and (*b*) that the University should open for degree students in the session 1968.
5. That a Development Plan be prepared (by the Vice-Chancellor and a designated architect) as a first priority and at the earliest possible moment.
6. That the Development Plan be so devised as to allow the University to develop and expand in the course of the years to a size of 2,500 students (excluding the students of Colleges and Institutes on outside sites) or, if practicable, 3,000 students.

CHAPTER VIII

ENTRANCE REQUIREMENTS, A PRE-UNIVERSITY YEAR, AND BURSARIES

156. We have based our thinking about the proper length of a degree course on a standard, at the beginning of the course proper, corresponding with the University Entrance standard of New Zealand. We consider that a course lasting three years beyond this level is of the right length both to meet the needs of the Region and to conform with the standards of the New Zealand and Australian universities for graduation. We examined the availability of students to enter at such a level and noted that Fiji estimated that its school leavers with University Entrance or better would build up from an estimated 186 in 1967 to 300 in 1970. We thought it probable that not more than two-thirds of these were likely to be available for entry into the first year of a University of the South Pacific degree course. We found it quite impossible to estimate closely the numbers likely to be available from other territories, not only because their secondary schools themselves are in process of expansion in amounts which are not completely known but also because it is impossible to predict how many from the territories most closely connected with New Zealand will look towards the University of the South Pacific, and how many to the New Zealand Universities. Our conclusion is that there will be room for more students besides those who have already been able to reach the University Entrance level before leaving school. For a number of reasons we very much welcome this.

157. Larger numbers will of course be available at School Certificate level and Fiji has estimated that a fairly constant number of about 300 will leave school after passing School Certificate, that is to say, will not proceed to attempt University Entrance at school. We have found the likely numbers from other territories to be unpredictable, but they are likely to be far from insignificant. We found that at least one major school in the Region will leave open the question of taking students beyond School Certificate level until it learns what entrance level is determined for the University of the South Pacific.

158. Clearly, a University purporting to serve the needs of the Region would be doing no great service to the territories other than Fiji if it pitched its entrance level at a point which at least for three or four years would be unattainable except for a tiny handful of students. There could be a frustrated potential entry from schools that do not go above School Certificate if our sole entrance level were pitched at New Zealand University Entrance.

159. We therefore think that the University of the South Pacific should have a pre-University or preliminary year. This will take students on from School Certificate level up to the equivalent of University Entrance level. It should be so designed that it would not be correctly regarded either as the first year of a four-year degree course or simply as a collective Sixth Form. It must be in as many ways as possible a preliminary and preparatory and also a diagnostic year, and it should give special emphasis to English language and to Science subjects. It can very suitably be called "the preliminary year". It would be a great advantage if it can also be so designed that for the purpose of a student who, during the course of it, or after it, transfers to one of the diploma courses at the University or the associated colleges, it can be accepted in place of the first year of the course to which he transfers.

160. We have also referred to the diagnostic possibilities of this year. The University will have to determine, whether by examination or by other methods of assessment, the suitability of preliminary year students to proceed

to the first year proper of a degree course, or to transfer elsewhere. It is likely that before long the University will find it convenient to set its own examination for entrance and not continue to rely on the handy New Zealand University Entrance examination, if it is to frame an education to suit the special character of the Region. The new examination should be keyed to the present New Zealand standard; but it will be desirable to re-plan the details in order to suit the Region, and also to have it under the University's own control, so that any raising of its standards in the course of time can be kept in pace with the rising achievements of school education. The University's assessment of the suitability of preliminary year students to proceed to the first year proper, without submitting themselves to the New Zealand University Entrance examination, will be invaluable experience on which to base future arrangements.

161. By adding the intake from the schools to the intake from the preliminary year, we have calculated our student build-up for the first triennium, and projected this forward to later years. New universities in other countries have successfully worked similar schemes of two-level entry of one kind or another; but it must be emphasised that this particular scheme of two level entry is somewhat experimental in nature, its use by any of the territories cannot be closely calculated and its period of continued existence cannot be estimated. As an initial arrangement, however, we are convinced that it will serve a most useful purpose, for Fiji itself as well as for other countries; and in the circumstances of the South Pacific, with its dispersed schools of unequal size and resources, it may have to continue for many years.

162. We have also considered the needs of students from the Region who may wish to proceed to higher education elsewhere than at the University of the South Pacific for courses of under-graduate study which will not be provided here. These may often need a higher qualification than University Entrance, which they cannot attain either at school or in the preliminary year. We have in mind for instance students wishing to proceed to a full medical, law, or engineering degree course overseas. Their needs can well be catered for if the first year proper of the degree course is suitably framed; though we appreciate the difficulty of framing it to take account, as if at all possible it must, of Australian and United Kingdom university requirements in addition to those of New Zealand universities. For these students, the first year of the degree course proper will in effect be a second preliminary year before transfer to the overseas University. We also have in mind that there might be a second take-off at this point into diploma courses, in accordance with the principles we have outlined for this multi-track university, and also some further take-off into employment. This is why the figure we have described under the comprehensive and perhaps misleading head of "wastage" at the end of the first year of the degree course proper is as high as 35 per cent.

Bursaries

163. It is clear that students will not be forthcoming in anything like the numbers which we have forecast unless financial assistance is available for those who need it. A student fee calculated on a "full cost of education" basis would have to be of the order of £550 or £600 without allowing anything for interest on, still less funding of, capital charges. Obviously very few students could afford to pay such a fee, and there is still left over the student's cost of living for the three or four years of his course. A good

bursary scheme will be needed in each of the countries sending students; and its aim should be to ensure that no student who is qualified to go to the University and wishes to do so should be prevented by financial need.

164. An ideal system would be that a bursary should be guaranteed to every student who is accepted as a student by the University. This no doubt passes an extra administrative strain to the University. But the University will have anyway to decide on the merits of each case whether individual students who apply should be accepted or not, and it may be thought unnecessary that another body should do the work all over again in deciding about bursaries. The financial details of the bursary schemes will no doubt be decided in each country; but equally without doubt the various schemes will turn out to be very similar.

165. A special difficulty may arise for Fiji. We have assumed—in consideration of discussions we have had with government officers, though we realise that detailed financial methods are matters for later decision by the Fiji and other Governments—that countries other than Fiji will make their financial contributions to the University by paying a cost of education fee for each of their students. It may be that Fiji will think it logical, and generally desirable, to do the same itself. But if Fiji makes its financial contribution to the University partly, or even largely, by direct block grant —as is done (no doubt in quite different circumstances) by the Governments of the United Kingdom, Australia and New Zealand for their Universities— it will need to allocate some small portion of the "cost of education fee" as a "student fee" for the individual student. Fiji's bursary scheme will then have to be worked out on this basis, and may not be similar to the schemes of the other countries.

166. It may well be that all countries may have to set aside considerably more money for bursaries than they would do if the University of the South Pacific did not exist—more perhaps than they have been forecasting in their forward plans. We merely draw attention to the fact that the success of the whole scheme for a University will depend on the willingness of Governments to provide the necessary bursaries.

CHAPTER IX

SUBJECTS AND FACULTIES

1. Degree Studies

167. Any university institution serving the South Pacific must have its courses geared to the needs of the Region, and we have had this in mind in taking submissions, and in considering our recommendations. We have given a great deal of thought to the status of the first appointments, and it is our considered view that if a new level of inspiration and a new kind of approach in these central studies is to be brought into the islands, full professorships must be available from the beginning in the major courses being offered.

168. In making our recommendations for subjects and teaching staff, we have had in mind the minimum needs of a degree-giving university catering for a student roll which, although quite small in its first year of operation, can be expected to rise by 1971 to about 750. We list in the following paragraphs the subjects that should be included in the curriculum from the beginning, with a brief outline of our reasons for including them.

Education

169. One of the most urgent needs of the whole region is a big increase in the number of teachers who are trained, both at graduate and at sub-graduate level, for work in the secondary schools; and one of our recommendations is that a Secondary Teachers' College should be established to be in association with the university and that the first Professor of Education, who should be one of the earliest to be appointed, should be its Principal. The proper development of both graduate and sub-graduate courses, and the planning of educational research, lead us to the conclusion that a Chair of Education should be one of the first to be established.

English

170. There is no need to argue at length the case for an early appointment in English. We have in mind the appointment of a Professor of Contemporary English, who is, or is willing to become, keenly interested in the special needs of a region where English is a second language to many of the students.

Linguistics

171. It is our view that from the beginning there should be a strong department of linguistics headed by a man of professorial rank. In whatever field his own special interest lies, he should be interested in developing studies of, and research in regard to, the languages of the South Pacific.

Economics

172. We have been impressed by the very urgent need in the Region as a whole for a scientific basis on which the economic development of the various Territories can be studied. We can see tremendous advantages to the Region in the establishment of a Chair of Economics at the University. It should not be difficult to attract from overseas an economist of distinction or high promise who will take advantage of the opportunities for special economic studies which are provided by the Region.

Mathematics

173. A sound training in mathematics is of vital importance for all work in the sciences and in the preparation of secondary school teachers, and consequently it should occupy a key role in the Universitly from its inception. There are major developments in progress on the teaching of mathematics at University level, and indeed also in the schools.

Physics and Chemistry

174. Both these traditional science subjects should clearly be introduced at professorial level.

Biology

175. Not only is Biology an important discipline in its own right, but it is also very valuable as part of the programme of students who are training as secondary school teachers. Furthermore, the opportunities that exist in the Region for research in both botany and zoology are almost unlimited and are very challenging. A full professorship should be established from the beginning if, as is very necessary, good early planning is to be ensured for courses both for degrees and for the Secondary Teachers' College.

Other Subjects

176. In addition certain other subjects should be included in the programme of the University even at the earliest stage. These subjects, namely History, Sociology, Theology and Home Science, could initially be in charge of a Senior Lecturer who would act as Head of Department.

SUMMARY

177. To summarise, the initial staffing of the University should be very much as follows:—

Education	Professor; two lecturers.
English	Professor; two lecturers.
Linguistics	Professor; two lecturers.
Economics	Professor; two lecturers.
Physics	Professor; two lecturers.
Chemistry	Professor; two lecturers.
Biology	Professor; two lecturers.
Mathematics	Professor; two lecturers.
History	Senior Lecturer; one lecturer.
Sociology (including Social Anthropology).	Senior Lecturer; one lecturer.
Theology	Senior Lecturer; one lecturer.
Home Science	Senior Lecturer; one lecturer.

178. In arriving at this list we were conscious of the strong claims of certain other disciplines for early inclusion, but we are of the opinion that the subjects just enumerated would most nearly meet the initial needs of the Region and supply a good basis for the construction of well-balanced general degree courses. Of the subjects which should be added to the curriculum at an early stage we wish to put forward, with particular emphasis, Geography. We add that the University should concern itself strongly with Pacific Studies right from the beginning. But we think it may wish to provide for teaching and research in these fields through members of other academic departments such as History, Economics, Sociology, Linguistics, Biology, etc., and also of course, when it comes to be established, Geography. An academic Committee of Pacific Studies will no doubt be established to co-ordinate teaching and to ensure support for research.

2. Diplomas

179. In a previous Chapter (Chapter V) we have dealt fully with the Colleges and Institutes that will be associated with the University and have discussed the diplomas for which they will be preparing students. We give a list of these diplomas and summarise their subjects as follows:—

(i) *Derrick Technical Institute*

Diplomas in technical subjects based at least initially on syllabuses of the New South Wales Department of Technical Education.

Diplomas in engineering based on the City and Guilds of London Institute's syllabuses.

Diplomas in commercial subjects based on the Royal Society of Arts and the London Chamber of Commerce joint syllabuses.

Diplomas for which the following subjects fields have been suggested by the Institute:—

Applied Science or Applied Chemistry
Architecture
Management (Industrial)
Work Study
Banking
Business Studies
Management (Commercial)
Public Administration

(ii) *University*

Certificate of Diploma in Education
Diploma in Home and Food Science
Diploma in Applied Science, or Applied Chemistry (if not at Derrick Technical Institute).

(iii) *Fiji School of Medicine*

Diploma of Medicine and Surgery
Diploma of Dental Surgery

(iv) *School of Agriculture*

Diploma in Agriculture.

(v) *Pacific Theological College*

Diploma in Theology.

3. Extra-Mural Studies

180. The University should have an Extra-mural Department to enable it to carry university studies to towns and villages through the Region, and to promote understanding of and affection for the University in the people of distant areas. It is almost certain that there will be great and rapidly increasing interest throughout the countries in many modern university studies, including such matters as international affairs, population studies, sociological research, human biology, economics, and especially of course the whole range of the Pacific Studies of the University.

181. The University should provide from its own general funds a Director of Extra-mural Studies, and a headquarters staff, both teaching and administrative. Experience shows that, when this work is under way and is beginning to show what it can do, other countries, distant from the University, will ask to have university extra-mural lecturers for themselves and their governments will almost certainly be willing to pay the cost of the necessary salaries and other expenses. In some cases there will probably before long be a demand for the establishment of extra-mural centres in distant islands. When this development comes it will be necessary for the University to work out, for the special circumstances of the South Pacific Region, an acceptable method for the interchange of staff from time to time. It will also be highly desirable to bring in the extra-mural teachers to the central university at reasonable intervals, to enable them to renew their scholarship, and to keep in touch with the up-to-date developments in the work of the intra-mural departments.

182. It will not be forgotten that university extension work of this kind can play, and should play, an extremely important part in the political and social education of the people at large, and especially of those thoughtful and active members of the public, all over the countries of the Region, who do so much to form opinion. It is hardly possible to think of any possible beneficient influence which could be more important in assisting the healthy development of democratic and responsible government, both national and local. Without educational provision of this kind it is hardly possible for governments, political movements or public opinion to keep in step with the rapid pace of the times.

183. There will need to be intimate co-operation between the Department of Extra-mural Studies and the Community Education Training Centre and careful thought should be given in initial planning to their respective functions and to the possibilities of joint or common teaching and common facilities for kindred activities.

4. Academic Advisory Committee

184. We think that the University, for the first five or seven years of its operation or for such longer period thereafter as the University may itself determine, should have a Special Academic Advisory Committee to assist it to safeguard standards. We have said before that the standards for the award of degrees will be kept at a steady and proper level by the use of external examiners in the final examinations; and the use of this method can be, and should in practice be, entirely effective. But the method must be effectively and imaginatively used. The examination system must be properly fitted to the teaching system, the examinations must be efficient and fair to the students, and the examination arrangements must be such that internal and external examiners can work well together. The examinations must not become external examinations, yet the influence of the external examiners must be able to be really felt.

185. The Academic Advisory Committee should meet from time to time—it need not necessarily meet every year—to review the teaching and examining arrangements, in order to satisfy themselves that these arrangements are effective in securing that the standards of the work and of the awards of the University are being kept at a proper level. The Committee should have no responsibility for arranging or conducting any particular examination; but they should be asked either to certify that the existing arrangements for teaching and examining are effective in the preservation of proper standards or to recommend what changes should be introduced. It should report to the Senate and Council of the University, and its Report should be published.

186. The Committee should consist of two or three representatives of the Senate, and the four Academic members of the University Council from overseas. Two visiting external examiners could be added for any particular meeting if desired. An overseas academic member should be in the Chair.

5. The University Library

187. It is not possible to stress too strongly the need for an adequate, well-stocked Library; indeed the Library should be looked upon as the working laboratory of the whole staff and student body of the University. A good library is expensive to establish, stock and maintain, but we believe that this is one part of the University in which it is very unwise to spend too little. The University authorities, in working out the detailed Development Plan, should give particular attention to the form and design of the Library and to its siting on the campus. We have mentioned that the Library will be used by students in all faculties and at all stages in their progress through the University. Consequently it should be so placed in relation to the other buildings that it will be easy of access to all.

188. Provision must be made in the building not only for adequate stack space and reading space for students, and for members of the academic staff and others engaged in research, but also for a sufficient library staff and for a servicing section and bindery.

189. But a library is not a fine building only; it must from the beginning be adequately supplied with the range of books and periodicals needed by students and staff in the various faculties. Stocks must of course be added to each year, but if the initial stock is not adequate, not only will the students in the early years be denied one of the very essentials of a University education, but the cost of making good the deficiency will put an unnecessary burden on the recurrent expenditure.

190. We are not experts but we should estimate that the Library will need at least 15,000 volumes as an opening stock, and this should grow to at least 40,000 within three or four years. It is also clear that the Library must have sufficient trained staff to enable it to provide an efficient and helpful service to the University. This is particularly important in this Region where many of the students will lack a background of regular systematic access to reading material, and will be able to afford to buy for themselves very few of the books they will need for their work. Even so, we think that the University will find it necessary to have a special bookshop on the campus. In the Library itself it will be necessary for a limited number of commonly used books to have multiple copies.

191. Thought should be given to ways in which outside assistance might be sought to help establish and maintain the Library. Overseas universities, world-wide educational foundations, and private organisations might be prepared to help either by way of financial grants or gifts of collections of books. The librarian will no doubt have this in mind when making his purchasing plans from the very beginning.

192. The question will of course arise whether the whole stock of books should be housed in the Central Library or whether in the case of some subjects of study the stock should be distributed around the campus in departmental libraries and in the libraries of associated colleges and institutes. There are very powerful arguments for keeping as many books as possible at the centre and certainly the University librarian should have general control over all libraries. In reaching a final policy on the question of departmental libraries the University authorities will need to pay very careful attention to all the special circumstances of this particular University. A decision on broad lines of policy will be necessary, in the interests of the Development Plan, at an early date.

CHAPTER X

RESEARCH

193. A Report of this nature would not be complete without some reference to the place of research in the frame-work of a University. We have already mentioned the importance we attach to attracting first-class teaching staff to the new institutions; the ability to do so will depend partly on the salaries and conditions of service that are offered, but partly, and perhaps in the end mainly, on the opportunities that are presented for individual research. Furthermore if a university is to play its proper role as a focal point for the advancement of knowledge among the communities it serves, it has certain obligations to these communities to provide the facilities to enable this to be done.

194. It is not possible to say in advance just what specific kinds of research will be undertaken, for these will depend in large degree upon the interests of the staff. But we have assured ourselves that the opportunities for research both in Fiji and in the wider region are practically unlimited and cover a very wide range of subjects. And there is an urgent need for much basic research.

195. We have said that members of the academic staff will have their own research interests. But apart from this, it is of course inconceivable that there should grow up in Suva a body of learned men and scientists without their being used more and more by Governments and other agencies in the public interest to undertake necessary enquiries and necessary projects

of research. Here we have one of the most striking uses of a University in these days. In the United States for instance many universities derive a large part of their income from research projects sponsored and financed by Government. In the United Kingdom, Australia and New Zealand professors are asked to do more outside the universities than they can spare the time for. Inevitably history will repeat itself in this matter in the South Pacific.

196. Various witnesses brought to our notice a number of research projects that have been carried out over the years in Fiji both by government departments and by private organisations; but most of these have been of a limited nature dealing with the application of techniques rather than with fundamental research.

197. The sound economic development of any country must depend upon a thorough knowledge of its resources—both actual and potential—and of the best way in which these resources can be produced, processed and marketed. The countries in the South Pacific region are tropical and subtropical, and their economy is based on a limited number of primary products. As the Department of Agriculture in Fiji have told us this provides a vast field for long-term and scientifically based research aimed at improving the productivity per acre, the strains of plants and the techniques of production; introducing new kinds of crops and establishing the right conditions for them. The problems involved in the establishment of farm stock such as dairy cattle, beef cattle and sheep in these sub-tropical lands also require proper study. In particular it may be hoped that the University will seek an agricultural economist in one of its first appointments to the Department of Economics.

198. The Department of Forestry in Fiji have emphasised to us that research is needed into the proper conservation and development of forest resources in the region. Many exotic trees mature very rapidly in these climates but there has so far been no long-term research into the best species of trees to introduce.

199. One most promising area for research is the sea. The peoples of the South Pacific have traditionally depended on the rivers and the seas surrounding their island homes as a great source of food supply. But they have fished the waters just to satisfy their daily needs. The resources of the tropical seas are far greater than this, and it is well recognised today that there are tremendous possibilities for research in this field. The water resources—within the reefs; above the shelving outer edge of the reefs; and in the deeper waters beyond—are of immense importance to the people of the South Pacific and these resources need to be carefully and scientifically studied. There are a number of research units in marine biology and oceanography in other tropical countries notably those attached to the University of Hawaii and the University of Florida, and an association of the University of the South Pacific with one or both of these institutions should certainly be explored.

200. We have been informed that one of the United Nations special agencies would be interested in sponsoring a research project in sea-farming in the South Pacific and this University would be a suitable centre for any such basic or applied research.

201. There are, too, great opportunities in this region for basic research in the social sciences. The variety of races and cultures to be found in the South Pacific provides a promising background for the study of man as an

individual and also as a member of a social unit. There are rich fields for research into languages and language structure, art forms, social anthropology, music, and history, to mention but a few.

202. There would be considerable advantages in a close association between the University of the South Pacific and other universities and organisations that are undertaking or sponsoring research under any of these headings. For example both the University of Auckland and the Victoria University of Wellington have been giving active encouragement to projects involving problems of the South Pacific. The University of Auckland has set up a South Pacific Programme Committee to encourage research, and it has initiated projects in anthropology, economics, education, geography, history, geology, archaeology, architecture, fine arts, languages, botany and zoology. Similarly the Victoria University of Wellington has a Pacific Studies Committee and has a number of research projects in similar fields.

203. The University of the South Pacific could offer a home and valuable facilities for researchers in many of these fields visiting for shorter or longer periods and in some of them its campus could become the central point for co-ordinating research in this area.

204. Finally of course we should mention educational research. Educators need to study the special problems inherent in the learning processes in this region. This involves a knowledge of how children grow and develop in their local communities. Research, too, will be needed in a whole range of educational problems as they apply to the South Pacific region—such as educational tests and measurements, teaching methods, curriculum development and the counselling and guidance of pupils. All these things will come within the purview of the Institute of Education.

205. It is quite clear that the South Pacific region offers a very wide range of opportunities for research and the successful development of the University will involve a close linking of its teaching activities and its research functions.

206. Apart from the Government Departments and the Colleges and Institutes, we have not ourselves found actual institutes or units of research established and in being in the Region, which could naturally associate with the University, thereby giving it strength as a home of learning, and in turn receiving strength from it themselves. This is perhaps surprising when it is considered that in several fields a good deal more than "bread and butter" research has been done here in the past. But the University will undoubtedly provide quickly an immense stimulus to research in the islands, both to its own members and to scholars and scientists from overseas. In particular there will easily develop close contacts with universities, not least in the United States, who already have research interests in the Pacific and can command resources of their own to pursue such research.

CHAPTER XI

FINANCE

1. Capital Estimate. Stage I

207. We have said in Chapter VII that the University should begin teaching on the Laucala Bay site at the beginning of 1968 with no new teaching buildings except laboratories, the R.N.Z.A.F. buildings being suitable for other purposes, with or without some adaptation, for the initial

student population of 220. The laboratories will be needed as soon as possible, as a first priority; and these should be followed by the beginning of 1969 by a student union and administrative buildings. During the period of Stage I up to 1970 we have said that the existing quarters will prove insufficient for the increased student population, and new hostels will have to be built; also that most of the adapted teaching accommodation will have to be replaced by new. By 1970 we anticipate that the total student body on the site will be more than 600.

208. We envisage the capital cost of Stage I including the new Secondary Teachers' College as likely to be of the following order:—

Building	*Cost*
	£
Science Laboratories, including initial equipment	270,000
Students' Union (First Stage) and Sports Facilities	70,000
Library (First Stage), including allowance for initial book stock	130,000
Hostels, dining rooms and kitchens (for 200 students) ...	200,000
Further Hostels, etc. (for 200 students)	200,000
Teaching Buildings, other than laboratories (First Stage) ...	230,000
Demolitions	8,000
Temporary Conversions	80,000
Roads and Other Site Works	40,000
Services	25,000
Fees	72,000
Maintenance Workshops, Transport and special equipment	50,000
	£1,375,000

209. At the end of Stage I we conceive of the University as being a fully viable university institution. It will be capable of further development, as the development of the Region and of its schools system calls for this. But it will give a most valuable, and indeed necessary, service to the South Pacific Region as it stands at the end of Stage I.

2. Recurrent Expenditure

210. It is naturally rather difficult to give a precise estimate of the recurrent expenditure likely to be faced by an institution not yet established. In another section of this Report we have recommended that certain Chairs should be established from 1968 and have also set out the number of supporting staff we think will be necessary to carry out the work of each department in an efficient manner. We have taken this into account in giving figures for the first year. We do not in this Report propose specific salary scales for the teaching staff of the University. It is clear, however, that if the institution is to occupy a proper place in the university world it must be able to attract first rate staff; and to do this the salaries must be in line with those paid in other countries. For convenience we give here a summary of the salaries at present paid for comparable departments in New Zealand Universities (Australian salaries are somewhat higher).

Professors	£3,250 to £4,000.
Associate Professors and Readers	£2,800.
Lecturers	£1,300 rising to £2,500.
Assistant or Junior Lecturers	£1,000 rising to £1,200.

211. There are additional expenses involved in the recruitment of staff for a university institution so far removed from world centres of population

and learning. These include such items as an expatriate allowance, passages for staff and families, both to take up initial appointments and for regular leave periods. Allowance must also be made for contributions to the superannuation of staff. We have given an estimate on a realistic basis of the total cost of staff salaries, and also the necessary allowances; and we have added an estimate of other recurrent costs such as administration, maintenance of library and departmental supplies and services and maintenance of buildings.

212. As an offset to this total we have taken into account various contributions that are highly likely to come from outside sources, particularly during the early, and especially expensive years of establishment of the University, towards the staffing and teaching costs of the University.

A. *First Year of Operation*

I. *Teaching staff*		
(i) Salaries	£91,000	
(ii) Allowances— passages for staff and families, expatriate allowances, travel on leave, superannuation contributions	£46,000	
II. *Administration, Maintenance of Teaching Departments, Maintenance of Buildings and Other Overheads*	£60,000	
		£197,000
Of this it is expected that various outside sources will, in the early stages, give assistance towards staff salaries, etc., estimated at		£70,000
Leaving net recurrent expenses		£127,000

B. *By 1971*

I. *Teaching Staff*		
(i) Salaries	£197,000	
(ii) Allowances	£98,000	
II. *Administration and Maintenance*	£131,000	
		£426,000
Less assistance for staff salaries		£70,000
Net Total		£356,000

213. It will be seen that we estimate that the net recurrent cost to the Region of running the University in the first year will be about £127,000 rising by the fourth year to about £356,000.

Note on Student Fees and Bursaries

214. We have included in our estimates no offset for income from student fees (see our paragraphs on Bursaries in Chapter VIII).

215. We understand that it is likely that financial arrangements will be so drawn up that students from countries other than Fiji will be paid for on a "total cost of education" basis by the Governments, or with the assistance of the Governments, concerned. But we do not know—and it has seemed to us to be premature to try to work out details—what arrangements the Government of Fiji itself will wish to make.

216. If Fiji elects to contribute to the University by itself also paying "cost of education fees" for its students, it will be entirely the responsibility of the University itself to balance its budget on the basis of its fee income alone. There is not necessarily any particular administrative difficulty about this. The University, as an independent institution, will have to balance its budget in any case, under any system of financing—even if part of its income comes from direct government grants. But under a thoroughgoing and "total cost of education fee" system the University will have to depend for its financial solvency entirely on the correctness of its forecasts of student numbers.

217. This might make the University more hesitant to take risks about the future than it is in the interest of the countries that it should be. But this situation could be met, if circumstances require it, by special direct grants or guarantees being offered by Governments to the University when the need arises. In any case, there is no reason of course, whatever the system, why any Government should not from time to time make a special additional grant, given as a direct grant, for some special purpose.

218. Decisions of policy on these matters will of course affect the total amount to be received as fee income by the University. We have made no attempt, for the reasons we have given, to give any forecasts of fee receipts to be expected from particular Governments.

CHAPTER XII

THE NEXT STEPS

219. As soon as it has been decided that a University shall be established, it will be most convenient, in our view, that an Interim Council, or University Development Council, should be set up to take the first steps. This body would go out of existence when the legislation establishing the constitution came into effect; but there would be advantage in providing sufficient time for the drafting of this legislation to be well considered, and there will be many details which may need discussion and negotiation. In the meantime there are a number of decisions and actions which need not be delayed, and which could well be taken on the authority of a suitable Interim Council. Also there may be one or two distinguished men or women, whose help and advice would be particularly valuable at the beginning, and who, while they might not feel that they could spare the time necessary for membership of the permanent Governing Body, might well be willing to serve on the initial Interim or Development Council.

220. The first action which needs to be taken is the appointment of a Vice-Chancellor. Clearly a very great deal is going to depend, for the whole University, on the first Vice-Chancellor, and the sooner he is appointed and brought on to the stage the better. He will need immediately a chief administrative officer, probably a Registrar; but this appointment should not be made until the Vice-Chancellor can play some part in determining it. The Vice-Chancellor will need to get to work at once, with a duly appointed architect, to prepare a University Development Plan, since if capital aid is to be sought from overseas sources, such a Plan will be an urgent necessity. The Interim Council will be able to take steps to appoint a Vice-Chancellor and to enable him to proceed with planning. It can also approve of the Development Plan.

221. It is important in the interests of good university planning not only that specialist guidance from overseas should be sought with the advice of

the Vice-Chancellor, but also that a very early appointment should be made to at least two professorial chairs, so that the Vice-Chancellor can be supported with necessary academic advice from the staff of the University itself at the very early stage when some far-reaching decisions may have to be made.

222. The Interim or Development Council should be constituted as follows: —

A Chairman,

3 Members appointed by the Governor of Fiji after consultation with the Executive Council.

2 Members from countries of the Region other than Fiji.

4 Academic members from the Universities of the United Kingdom, Australia, New Zealand and the University of Hawaii (of whom it could be hoped that at least one might be present at each meeting).

The Director of Education of Fiji.

The Vice-Chancellor should become a member as soon as he is appointed.

223. The early experience of the Interim Council will give valuable guidance both for the completion of the drafting of the whole Constitution of the University, as it is to be finally established by law, and also for constituting the eventual membership of the Council and Court. This is an important consideration if there is to be a good prospect of efficient and responsible government of the independent and autonomous University, and if in addition there is to grow up as time goes on a proper involvement of the whole Region in broad issues of policy.

APPENDICES

1. List of Submissions.
2. Summary of all Facilities for Post-Secondary Education and Training in the Region.
3. The Fiji School of Medicine.
4. Information about Islands Students Attending Post-Secondary Institutions Overseas.
5. Fiji Secondary School Output Targets.
6. Architect's Report.
7. List of Documents, Pamphlets etc. made available to the Mission.

APPENDIX 1

SUBMISSIONS

The Director of Education, Fiji.
The Director of Education, Western Samoa.
Heads of Government Departments, Fiji.
The Bishop in Polynesia, the Rt. Reverend J. C. Vockler, O.G.S.
The South Pacific Commission Community Education Training Centre.
The Reverend and Mrs. S. G. Andrews.
The Fijian Teachers' Association.
The Parents' Association for Culture and Education, Nadi.
Mr. D. R. E. Chandler.
The Marist Brothers' High School Old Boys' Association.
The Marist Brothers in Fiji.
South Pacific Sugar Mills Limited.
Director of Medical Services, Fiji.
Dr. G. Knight, Principal of the Pacific Theological College.
The Bishop of Melanesia and representatives of the churches in the British Solomon Islands.

APPENDIX 2

Summary of Facilities for Post-Secondary Training in the South Pacific

MEDICAL, DENTAL AND NURSING TRAINING

Fiji

Fiji School of Medicine: Diploma and Certificate courses for

Assistant medical officers ...	5 years
Assistant dental officers ...	3 years
Pharmacists	
Laboratory technicians ...	
Dieticians	
Physiotherapists	
Health inspectors	2 years
Radiographers	

Entry: generally School Certificate.
Roll 1964: 168.

Nursing

Central Nursing School ... ... 3 years

Examinations: Qualifying Examination of the Fiji Nurses' and Midwives' Board and
New Zealand Final Professional Examination.
Entry: not yet School Certificate.
Roll 1964: 150.

Lautoka Nursing School ... ... 3 years
Qualifying Examination of the Fiji Nurses' and Midwives' Board.
Entry: below School Certificate.
Roll 1964: 80.

American Samoa

Classes for laboratory technicians at the *Samoan Hospital.*
Nursing—3 years (recognised in U.S.).

Tonga

Queen Salote School of Nursing.

TEACHER TRAINING

Fiji

Corpus Christi Training College ... ... 3 years
Entry: School Certificate.
Roll 1963: 17.

Nasinu Training College ... ... 2 years + 1 specialist year
Entry: varied.
Annual output: about 100.

Fulton Missionary Teacher Training College ... ... 2 years
Entry: varied.
Roll 1963: 20.

Gilbert and Ellice Islands

Government Teacher Training College, Tarawa ... ... 3 years
Entry: Form III.
Roll 1961: 24.

Nauru

Nauru Teacher Training Centre
Nauruan Trained Teachers' Certificate.
Roll 1963: 25.
Also—in-service training.

Tonga

Teachers' Training College ... ... 2 years + 1 year's probation
Entry: Lower Leaving Certificate.
Roll 1963: 66.

W. Samoa

Government Teacher Training College
Roll 1963: 190.

American Samoa

Teacher Training College ... ... 2 years
Entry: from High School.
Roll 1961: 14.

Cook Islands

Nikao Training College ... ... 3 years

Cook Islands Trained Teachers' Certificate.
Entry: 2 years' secondary education.
Roll 1965: 167.

Niue Island

Teacher Training Centre

Roll 1965: 36.

AGRICULTURE AND FORESTRY

Fiji

School of Agriculture ... ... 3-year diploma course

Entry: School Certificate in prospect but in the past usually Fiji Junior Certificate.

Roll: 30.

W. Samoa

Alafua College of Agriculture.

American Samoa

Department of Agriculture: training of agricultural extension agents.

ENGINEERING AND BUILDING

Fiji

Derrick Technical Institute

Full-time courses in building and engineering: 2 years
Entry: Fiji Junior Certificate
Day-release Apprentices' Trades Courses:

- Automotive Engineering
- Boilermaking/welding
- Carpentry and joinery
- Electrical fitting and mechanics
- Plumbing and gas fitting
- Refrigeration
- Shipbuilding
- Aircraft maintenance engineering

Extension classes:

- Carpentry and joinery—Stages 1–3
- Automotive Engineering—Stages 1–3
- Fitting and machining—Stages 1–2
- Electrical Trades Stage 1
- Shipbuilding—Stages 1–2

South Pacific Sugar Mills Limited

Apprenticeship training for electricians, fitters and turners, carpenters, blacksmiths/welders, motor mechanics, plumbers.

Nauru

British Phosphate Commission Apprentice Training

W. Samoa

Trades Training Centre, Apia

2 years' secondary school course + 3 or 4 years' part-time training leading to a trade certificate in:

Carpentry and joinery

Metalwork and general engineering
Motor engineering

American Samoa

Vocational High School
Entry: 9th grade
Annual intake: 35 boys—Building Trades

TELECOMMUNICATIONS

Fiji

S.P.A.T.C. Communicators' Training School
One-year Courses For Radio and Teleprinter Operators
Telecommunications Training School
Same examination as above
Also short courses

B.S.I.P.

Posts and Telecommunications Training—3 years
Entry: in theory 2 years' secondary education
General course in mathematics, radio theory and repair work.

Tonga

Government training of wireless telegraphists

Cook Islands

Radio Department gives junior and senior training for radio operators

SURVEYING AND DRAUGHTSMANSHIP

Fiji

Derrick Technical Institute
Extension classes: Architectural Draughtsman's Certificate
Entry: School Certificate

B.S.I.P.

Survey and Draughting School—2 years
General draughting course
General survey course
Roll: 20

American Samoa

Vocational High School
Evening classes in surveying
Roll 1961: 25

COMMERCIAL TRAINING

Fiji

Derrick Technical Institute
Full-time: Stenography course—2 years
Entry: Fiji Junior Certificate Examination

Exams: New Zealand Public Service Shorthand Typists' Examination
Pitman's (Australian) Shorthand Speed Examination
R.S.A. Typewriting

Extension classes:

- Accountancy
- Book-keeping
- Shorthand and typing
- Commercial law

Cook Islands

Government Clerical Training for:

Senior Examination:

- Government procedure
- Book-keeping
- Office routine
- Advanced typing

Co-operatives Department trains co-operatives' secretaries in book-keeping and law

MISCELLANEOUS

Theology

Fiji

St. John's House—4 years

Davuilevu Theological College—3 years (Diploma in Theology of Melbourne College of Divinity)

Fulton Missionary College

Community Education

Fiji

Community Education Training Centre

Home Economics—1 year
Roll 1965: 20
Preparation of Extension Materials for Community Education
Roll 1965: 10

Cook Islands

Community Development Department

Training for assistant community development officers (including building construction)
and
information office assistants

Printing

B.S.I.P.

Literature Production Training Centre—1 year
Roll: 12

FIJI SCHOOL OF MEDICINE—1965

HISTORY

The Fiji Islands were ceded to Queen Victoria by the Fijians in 1874. In 1878 a number of Fijian young men were trained as public vaccinators. They proved so resourceful, and the need for rural medical practitioners became so evident after the measles epidemics starting in 1875, that in 1886 a group of Fijians were started on a medical course which was to become known as the Suva Medical School. The standard course of training was of three years, the first group of graduates finishing in 1888, and receiving their certificates in January 1889. Subsequently Indians and Rotumans of the Colony of Fiji were accepted for training. In 1928, stimulated and assisted by the Rockefeller Foundation, mainly through the efforts of Dr. S. M. Lambert, the School was enlarged to admit students from other Pacific Islands territories, and was re-named the Central Medical School.

The course of medical instruction was extended to four years in 1933, and to five years in 1956, at which it still remains. The present main School building at Tamavua was opened by Her Majesty The Queen in 1953. The name was changed to Fiji School of Medicine in 1961. Medical graduates were nominated and employed by Government as Native Medical Practitioners in Fiji, later re-named Assistant Medical Practitioners, in 1957 Assistant Medical Officers, and from 1964 Medical Officers; in other territories by such terms as Samoan Medical Practitioner, Tongan Medical Practitioner, etc.

Dental students first graduated in 1945; Fiji graduates are employed by the Medical Department, Fiji, or their territorial governments as Dental Officers.

ADMINISTRATION

The School is situated at Suva on Viti Levu (the largest of the Fiji group of islands). It is administered by a Principal under the direction of the Director of Medical Services of the Colony. Two Boards are concerned—the Advisory Board, which meets occasionally and advises the Director of Medical Services on the policy of the School, and the Academic Board, which meets frequently and is concerned with the curriculum, syllabuses, student discipline and other internal aspects. The composition of these Boards is set forth later.

OBJECTIVES

The principal function of the School is the training of selected students to a standard acceptable for registration in Medicine and Dentistry, for employment in Government Service only, as Medical Officers and Dental Officers. Such students are accepted and trained from many Pacific territories—British Colonies and Protectorates, American, Australian and New Zealand territories, the Kingdom of Tonga, and Western Samoa. In addition, courses of instruction are given in a number of professions ancillary to medicine and dentistry; and, on passing qualifying examinations, certificates of competency are issued. Certain post-graduate courses are available, and various post-graduate refresher courses are given. The language of instruction is English. Both male and female students are accepted.

FINANCE

The School is financed as a division of the Medical Department of the Government of Fiji. All students must be sponsored by their governments. Fees for students of territories outside Fiji are payable to the Fiji Government by such Territorial Governments, or by an International Agency, or by an approved philanthropic organisation.

All medical and dental and ancillary students from outside territories live in School quarters, where study hours are compulsory and supervised. The usual fees cover board and lodging, tuition, necessary books, notebooks and equipment, working clothes, pocket money, travelling expenses on duty, and medical and dental treatment.

COURSES

Each academic year extends from early February to mid-December, and is divided into three terms; these embrace one long and two short vacations.

Medical Course

A uniform standard of admission is impossible, owing to the varying standards of education available in the Pacific Territories. For Fiji applicants, the minimum standard required is a pass in Cambridge Overseas or New Zealand School Certificate examination, and preference is given to those with higher grade passes, especially those including mathematics and at least one of the basic sciences. Students from Territories outside Fiji, if they fall below this standard, are put through a preliminary course (details of which are given later) until they approximate to it and can enter the course proper.

The course lasts for five years and is divided as follows:—

1st Year—Physics, Chemistry and Biology are the main subjects. Instruction in English and Mathematics is also given.

2nd Year—Anatomy and Physiology, including Histology and Biochemistry, with a little Pharmacology.

> *Note:* Throughout the three following years the students spend most of the day at the Colonial War Memorial Hospital in wards and clinics, undergoing practical instruction, bedside experience and clinical clerking; the following are the formal lecture courses in these years—

3rd Year—After one term of Introductory Medicine and Introductory Surgery, the students enter a two-year lecture course in Medicine and Surgery. Throughout this year they receive tuition in General and Clinical Pathology, Bacteriology and Parasitology. Lectures in Applied Anatomy and Applied Physiology are also given.

4th Year—Formal instruction in Medicine and Surgery continues throughout this year, as do Applied Anatomy and Physiology lectures. Instruction in Obstetrics and Gynaecology begins. Throughout the year a course in Preventive Medicine, with emphasis on Environmental Hygiene, is also given. Instruction in Exodontia is given by the Dental Department, and a special course in Tuberculosis at Tamavua Hospital.

5th Year—In the first term formal lectures in Medicine and Surgery are completed, but clinical work continues until the end of the year.

In the second term a number of special subjects are dealt with—Forensic Medicine, Child Health, Ophthalmology, Leprosy, Psychiatry; more Obstetrics, a refresher course in Tuberculosis, and a wider course in Social and Preventive Medicine.

On completing the course of studies and passing all qualifying examinations, a graduate is granted the Diploma of Medicine and Surgery of the Fiji School of Medicine.

Examinations

End-of-term examinations are held in subjects studied during that term. At the end of the course of study in any subject a qualifying examination in that subject is held; failure will mean repetition of that course, or on occasion a supplementary examination may be granted.

The final examinations consist of written papers and clinical and oral examinations in the following subjects—Clinical Medicine, Preventive Medicine, General Surgery, Surgery Specials including Anaesthesia, Gynaecology and Obstetrics. A candidate failing in the final examinations will have to repeat part or all of the year, being granted supplementary examinations in special circumstances, at the discretion of the Academic Board.

Dental Course

This course is of three years' duration. Admission requirements are the same as for the Medical Course.

1st Year—as for Medical, but science subjects at a slightly lower level; Oral Anatomy is added.

2nd Year—Anatomy, Physiology and Dental Subjects.

3rd Year—Dental Subjects only.

(Dental subjects include—Clinical and Clinical operative Dentistry, General and Dental Pathology, Bacteriology, Dental Equipment, Anaesthesia, Radiology, Pedodontia, Jurisprudence, Preventive Dentistry and Dental Health Education.)

Prosthetics is not covered in this course, but can be taken as a 4th (post-graduate) Year.

On completing the course of studies and passing all qualifying examinations, a graduate is granted the Diploma of Dental Surgery of the Fiji School of Medicine.

Note: Throughout the Medical and Dental Courses, very strong emphasis is laid on the preventive side of the two disciplines, and recent years have seen considerable advances in the teaching of this aspect.

Preliminary Course

The varying standards of education in Pacific Islands territories make it difficult to achieve any uniformity in admission standard to the School. Since 1955 a full time course at second school level has been supplied, for overseas students only, in English, Mathematics, Physics, Chemistry and Biology. This is divided into two classes:

1. Preliminary Year.
2. Intermediate Year.

A student estimated to require only one year of Preliminary Course enters Intermediate Year, and may then promote in the following year to his course proper. If two or more years are anticipated, he will enter Preliminary Year, then promote to Intermediate before finally entering his course. The majority of admissions from outside Fiji require at least one year in this class.

This course serves two purposes—

1. It brings the majority to a reasonably adequate level of admission in the necessary subjects to the first year proper.
2. It acts as a useful indication to staff of potential and suitability of new students. A small number of students are found unsuitable for any course; some intended for Medicine or Dentistry are found unsuited to these but may usefully be diverted to Ancillary courses, if agreeable to their Territorial Governments. Such diversion may also follow failure at end of first year medical or dental.

Ancillary Courses

The admission requirements for these courses are less stringent than those for Medical and Dental courses. While standard aimed for is minimum of Cambridge Overseas or New Zealand School Certificate, this cannot always be strictly adhered to for all courses. The requirements of admission were modified in 1963, and the majority of overseas students may now be expected to spend at least one year in the Preliminary Course before entering the courses proper.

Most of these courses are in the nature of apprenticeships; that is, the students work in divisions of the Medical Departments in Suva, carrying out the ordinary functions of trainee workers in these departments. This is combined with specific courses of instruction, which may take the form of separate courses, or attending certain Medical or Dental courses, or the science lectures of the Preliminary Course.

The courses and their durations are as follows :—

Physiotherapy

3 year course; latest course beginning February 1965, next course as yet uncertain.

Pharmacy

3 year course; begins every 2nd year, next course 1966.

Laboratory Technology

3 year course; begins annually.

Radiography

2 calendar years course; begins annually.

Sanitation (Assistant Health Inspector)

2 year course—1st year mainly theoretical training in the School, 2nd year field work in Fiji or students' own territory. Usually begins annually; latest course started February 1965, next 1966.

Sanitation (Health Inspector)

2 year course for selected candidates, leading to a Diploma in Public Health Inspection for General Overseas Appointments. Examinations are conducted by the Royal Society for the Promotion of Health, London. Next course begins probably February 1966.

Dietetics

3 year course. Leads to a certificate of competency as an institutional dietician. Latest course started February 1965, next course as yet uncertain.

External Students

The 1st Year class of the Fiji School of Agriculture attends full-time for instruction in Chemistry, Physics, Biology, Mathematics and English.

Post-Graduate Training

At present there is only one post-graduate course which leads to a diploma, and this is held annually. It is for selected Medical Officers, of not less than three years' experience, lasts six months and leads to the Certificate of Public Health (Fiji).

General Refresher courses, and special courses in Medicine, Surgery, Obstetrics, Gynaecology, Anaesthetics, Ophthalmology, Leprosy and Tuberculosis may be given by special arrangement. A year is usually required for a thorough grounding in each of these specialities, though shorter courses can be arranged. General refresher courses (which cover Medicine, Surgery, Obstetrics and Gynaecology) should not be of less than six months.

Overseas Post-Graduate Courses

An increasing number of graduates of the School are being sent on courses in specialised subjects in Australia, New Zealand, United Kingdom, Malaya and Singapore, and recently U.S.A.

Enrolment

The total enrolment for 1965 is expected to be 190 students (including post-graduate) of which 93 are from Fiji, 97 from overseas.

Of these, 77 are taking medical, 25 dental, and 60 ancillary courses, with 10 post-graduate.

Overseas students come from the following territories:—

British Honduras, British Solomon Islands Protectorate, Cook Islands, New Hebrides, Gilbert and Ellice Islands Colony, Papua-New Guinea, Nauru, Niue, Tokelau Islands, Tonga, Western Samoa and United States Trust territory.

BOARDS

Members of the Advisory Board

Director of Medical Services (Chairman); Principal (Secretary); Director of Education; Secretary for Fijian Affairs; Deputy Director of Medical Services; Senior Dental Officer; Medical Superintendent, Colonial War Memorial Hospital.

Members of the Academic Board

Principal (Chairman); a Lecturer in Pre-clinical subjects (Secretary); Director of Education; Senior Dental Officer; Medical Superintendent, Colonial War Memorial Hospital; Physician Specialist; Surgeon Specialist; Obstetrician/Gynaecologist; Pathologist; Lecturer in Social and Preventive Medicine; a Lecturer in Pre-medical subjects.

APPENDIX 4

INFORMATION ABOUT ISLANDS STUDENTS ATTENDING POST-SECONDARY INSTITUTIONS OVERSEAS

Table 1

Pacific Islanders studying overseas in institutions other than secondary schools in 1963

Host Country	Fiji	B.S.I.P.	W. Samoa	Papua & New Guinea	New Zealand	Australia	Hawaii	U.K.	U.S.A.	Canada	India	Pakistan	France	Total
Students' Country														
Fiji	—	—	—	—	141	198	10	146	20	2	20	2	—	539
Gilbert and Ellice Islands ...	3+?	6	—	—	1	7	—	9	—	—	—	—	—	26+
B.S.I.P.	3	—	—	17	5	2	—	4	—	—	—	—	—	31
Tonga	7	—	—	—	28	5	—	11	—	—	—	—	—	51+
New Hebrides ...	—	3	—	—	—	—	—	1	—	—	—	—	2	6+
Cook Islands ...	6	—	14	—	54	2	—	—	—	—	—	—	—	76
Niue Island ...	7	1	4	—	21	—	—	—	—	—	—	—	—	33
Tokelau Island ...	2	—	25	—	1	—	—	—	—	—	—	—	—	28
Total ...	28	10	43	17	251	214	10	171	20	2	20	2	2	790

To these must be added Nauruans, who go mainly to Australia, Western Samoans, who go mainly to New Zealand and who numbered 79 in 1962, American Samoans who numbered 63 in 1961 (7 to Fiji, 4 to W. Samoa and 52 to U.S.A.) and French-speaking Islanders of whom probably approximately 200 were in France.

Table II

Students from Fiji in Australia and New Zealand in 1964

	Universities	Technical Colleges	Teacher Training Colleges
New Zealand	132	1	6
Australia	97	12	4
Total	229	13	10

Table III

Pacific Islanders in New Zealand Institutions in 1964

	Universities	Technical Institutes	Teachers' Colleges	Totals
Cook Islands	5	—	9	14
Fiji...	132	1	6	139
B.S.I.P.	1	—	6	7
Tonga	23	1	13	37
W. Samoa	43	2	9	54
Other Islands	7	1	5	13
Total	211	5	48	264

Table IV

Pacific Islanders in training in Britain in 1963–64

	Universities	Technical Colleges	Teacher Training	Nursing Training (Approx.)	Professional and Practical Training (Approx.)	Total
Fiji	10	38	3	10	1	62
B.S.I.P.	2	—	2	—	—	4
Gilbert and Ellice Islands ...	1	1	4	3	—	9
New Hebrides ...	—	—	—	1	—	1
Tonga	3	—	—	8	—	11
Total ...	16	39	9	22	1	87

[*Note:* The numbers in this table are very much on the low side as the table does not include students in private colleges or any pursuing part-time studies.]

APPENDIX 5

FIJI SECONDARY SCHOOL OUTPUT TARGETS FOR 1966–70–74–78

		1966	1970	1974	1978
Leaving School after failing School Certificate Examination	Boys	265	375	400	575
	Girls	70	90	240	560
	Total	335	465	640	1,135
	Science Pupils				
	Boys	167	278	310	432
	Girls	53	77	185	420
	Total	220	355	495	852
Leaving School after passing School Certificate Examination	Boys	205	235	245	288
	Girls	110	130	225	280
	Total	315	365	470	568
	Science Pupils				
	Boys	165	218	245	216
	Girls	43	62	115	210
	Total	208	280	360	426
Leaving School after failing New Zealand University Entrance Examination	Boys	88	186	190	227
	Girls	12	14	80	208
	Total	100	200	270	435
	Science Pupils				
	Boys	62	123	132	151
	Girls	4	9	46	139
	Total	66	132	178	290
Leaving School after passing New Zealand University Entrance Examination	Boys	129	258	305	341
	Girls	27	42	165	312
	Total	156	300	470	653
	Science Pupils				
	Boys	85	171	202	226
	Girls	18	27	110	210
	Total	103	198	312	436
Totals	Boys	687	1,054	1,140	1,431
	Girls	219	276	710	1,360
	All	906	1,330	1,850	2,791
	Science Pupils				
	Boys	479	790	889	1,025
	Girls	118	175	456	979
	All	597	965	1,345	2,004

Note: Science pupils are those including at least two of the following subjects in their courses of study:—

Mathematics
Biology
Chemistry and Physics.

APPENDIX 6

ARCHITECT'S REPORT ON RNZAF BASE LAUCALA BAY, FIJI CONVERSION FOR EDUCATIONAL PURPOSES

(A) Site

1. *Position.* At the Eastern Apex of Suva Point 3 miles by road from Suva Town.

2. *Orientation.* Generally toward East by South.

3. *Topography.* The upper area lies on a slope towards the East. It is broken into a series of low ridges by shallow gullies. The surface is generally very irregular, slopes though short tend to steepness for building purposes.

The lower area is adjacent to the sea and is generally completely flat.

4. *Geology.* Thin red volcanic soils overlying beds of soapstone in the upper area. In the lower area mainly alluvials and sands probably overlying soapstone. The soapstone tends to have a very broken surface with deep wide fissures and unexpected changes in level. In the lower area changes in level of any depth to possibly 25–30 feet can be expected.

5. *Climate.* Generally similar to that of Suva but tempered more by direct exposure to prevailing winds.

6. *Area.* The upper area consists of approximately 118 acres. The lower of a further 18 acres. These areas are subdivided by Buckhurst Park —the local sports ground.

There are other areas but these have not been considered as they are too far removed.

7. *Planting.* The whole of the upper area is grassed and reasonably well planted with various species of indigenous trees and shrubs though to no apparent plan.

(B) Buildings

1. *Number.* On both areas there are a total of approximately 210 buildings. These cover houses, single quarters, amenities buildings and service buildings. There are further buildings on other sites which have not been considered in this report.

75 of the 210 occur in the lower area and with one or two exceptions are all service buildings. 100 are residential.

2. *Size.* Buildings vary from under 50 square feet of floor area to over 43,000 square feet. Excluding houses 37 buildings exceed 1,000 square feet and 23 exceed 2,000 square feet. Only 4 exceed 5,000 square feet.

3. *Construction.* All the buildings are of one of three types of construction:

(*a*) Wood frame, sheathing and partitioning with G.C.I. or asbestos cement roofs on concrete piles on concrete slab floors.

(*b*) All concrete with wood frame roofs covered with asbestos cement.

(*c*) Generally similar to (*b*) except for the use of concrete block work.

In most cases wood framed buildings are unlined. The timber used is oregon of varying quality. Where linings are used they are generally hardboard or softboard. Foundations vary from wood pile to concrete pile and concrete slab.

Some cases of wooden buildings on concrete slab foundations poured straight into the ground without the benefit of an edge beam were noted. Apart from the very small only about 35 are concrete or concrete block.

4. *Date of Construction.* Most of the wooden buildings date back to the 1940 period while the concrete and concrete block buildings are of the 1950–60 period. No more precise dating was available readily.

5. *Condition.* Generally up until recently all the buildings have been well maintained but it is noticeable in certain cases that there has been a falling off of standards. I was informed that this was due to the lack of sufficient funds. Broadly speaking the wooden buildings are approaching the end of their economic life. It should be clear that these buildings can be kept operative almost indefinitely if sufficient finance is available. However this can reach a point where it is better to dispose of them.

I am informed that many of the buildings are termite infested but could not get anyone to show actual examples and I saw none myself. The main source of deterioration seen was dry rot in weatherboards and lower framing, failure of flooring, and G.C.I. roofs. Weatherboards are often cracked and unsightly. In at least two of the larger buildings new floors have been laid.

Buildings which have been vacated and closed up for some time are dirty and smell musty. All the concrete buildings are in good condition though there are minor works required.

6. *Economic Life.* The economic life of the wooden buildings may in some cases reach 10 years but apart from these, under the local conditions, it is doubtful if the greater part could be given more than six years with quite a number less than four years.

7. *Maintenance Costs.* I was informed that at present the cost of maintaining all buildings adequately would require an annual allocation of approximately £8,000 per annum or very roughly 1s. per square foot of floor area per annum.

In view of the vacation of some buildings and the falling off in maintenance of buildings generally it is probable that this figure would have to be higher for one or two years following the handing over by the Royal New Zealand Air Force. With increasing age it is certain that this figure will increase fairly sharply. I am of the opinion that the wooden buildings are likely to require an average maintenance figure of approximately 1s. 6d. per square foot per annum excluding the possibility of such major work as reflooring, reroofing, rewiring and replacement of weatherboards. Any one of the larger of these items could add in any one year in respect of any particular building a further 4 or 5 shillings per square foot. This type of maintenance work will be increasingly required as time goes on. If there is serious termite infestation the situation could be more serious and buildings could have to be condemned out of hand at any time.

8. *Total Area of Buildings.* It seems that in all there is a total area of about 280,000 square feet of building on the site. Of this total approximately 75,000 is in houses and their attached servants' quarters. A further approximately 62,500 is in single accommodation. These figures provided locally are overall or gross area and include verandahs. Checks have indicated individual errors in computation of upwards to 10 per cent. There is probably an overall error of about 2 to 3 per cent. In all cases checked the error was on the high side.

9. *Utilization.* Apart from residential buildings and purely service buildings such as toilet blocks, telephone exchanges etc. there are approximately 64 buildings potentially useful for educational purposes for a limited period. These have a gross area of about 146,000 square feet. It is difficult to assess

an accurate figure for conversion to net area due to lack of a clearly defined purpose but a figure of 1·33 : 1 could provide a useful guide. This gives a total net area of about 109,000 square feet.

As mentioned above many of the buildings are quite small and would be of rather limited possibility. Appendix 6A gives a list of all likely buildings in this group with an indication of possible use. Most of the residential buildings can be used as they are. The only exception to this may be the present Airmen's Barracks in which each room is designed to sleep four persons. This could be unsuitable for students. However it would be difficult to sub-divide these into two, each space so created to sleep two students. Sub-division into four would not be impossible but more costly and would produce rather small rooms.

Appendix 6B gives details of these buildings.

(C) Services

1. *Water.* Supply is from Suva through a concrete reservoir on the hill behind the Base. I understand that the main is 6″ asbestos cement with branches in small bore copper and probably also galvanized mild steel.

The supply generally seems adequate though I am informed that the pressure is about 20 pounds in some of the higher areas. Elsewhere pressures up to 50 pounds are available.

2. *Sewage.* Sewage is piped from groups of buildings into a common septic tank. There are several of these systems. Effluent is piped away and discharged into natural watercourses to the east of the upper area.

The arrangement in the lower area seems to be the same with effluents discharging into the sea. I understand that the system is operating satisfactorily.

3. *Electricity.* Power is supplied from Suva and is generally by underground reticulation within the Base area. I understand that the supply is reliable and at this time adequate.

4. *Fire Fighting.* Hydrants are provided along the route of the 6″ water main at a number of points. Hand extinguishers are provided at most of the buildings though it is possible that these may be removed by RNZAF. There are no first aid hose reels. The station maintains its own fire tender and is also serviced by the Suva Brigade.

5. *Stormwater.* Stormwater from roofs appears to be collected from individual buildings, or groups of smaller buildings and piped to discharge into the nearest natural watercourse.

6. *Roading.* The whole area is well serviced with sealed roads of good quality generally about 24′ 0″ carriageway and mainly kerbed and channelled. Surface water is collected and discharged into natural watercourses where channelling is provided.

(D) Reservation

It is probable that the RNZAF will wish to retain a portion of the site for their own purposes. At this stage it is not known with any certainty where or precisely how large this part will be. There are indications that it will encompass part of Areas 6 and 7 and the whole of 8 and 10 (see Appendix 6C). Some of the buildings shown on the Appendices and used in computing areas will likely be included in the reservation and allowance in all figures must be made at some time for this.

(E) Recommendations

1. *General.* Until a firm decision is made upon the nature of the establishment recommendations can only be of a very general nature.

2. *Site.* The position seems well suited to educational purposes. It lies well to the prevailing winds, is well drained and reasonably adjacent to the sea and to Suva. The area of land should be adequate for a substantial student body. Allowing for an approximate area of 35 acres to be reserved by RNZAF there will still remain one hundred acres.

3. *Student Hostels.* In the Fijian climate it is probable that a figure of 25 persons per acre on a free site and over the whole site would be as many as could be accepted. If further allowance is made for the contours of the site this figure could probably not exceed 20. This is further complicated by existing buildings which are well spaced out and occupy the best sites. Therefore it is doubted whether more than about 12 persons per acre could be accepted for the basis of a general computation unless some live out. On the upper site as it stands and assuming development of single storey hostels of similar type to those already existing it is doubtful if more than 750 students could be accommodated without resort to major earthworks. By using the fairly normal type of 3 storey hostel blocks for future development it should be possible to attain a student body of about 1,200 without major earthworks. In making this assessment I have allowed for use of the whole of the upper area except RNZAF reserve.

Should the decision be to develop a teachers' training college of say upwards to 250 students it should be possible to contain the whole college within the upper area.

Sufficient residential accommodation is already available.

4. *Staff Residential.* There are now some 43 houses on the site. It seems probable that about 25 will be left after the RNZAF have made their reservation. Some of these houses are of wooden construction and have a very limited life. There seems to be space suitable for about another 4 or 5 houses.

5. *Teaching Facilities.* In the first instance there appears to be sufficient area of existing building for teaching purposes on the whole site. However only some 18,000 gross square feet of area is in permanent materials. The whole of the remainder should be replaced within about ten years. One of the problems in using these buildings is their small size and rather scattered nature. It will be difficult to administer such a complex. Student movements during the day will amount to a considerable distance.

All the permanent materials buildings are sited in the lower area approximately 3/5 of a mile from the residential area. Here also lies the bulk of building in any way suitable for teaching purposes. This would suggest that this area should be regarded as the teaching area if rolls are to exceed about 300–400.

The buildings in the lower area are more concentrated, staff and student movements on the campus would be shorter and administration easier. There still however remains the distance from the residential area. Should replacement of existing buildings be undertaken on the lower area it is possible that some 250,000 to 300,000 gross square feet could be concentrated, mainly in two and three storey buildings. This gives a site density of ·5 and a ground cover of about 12½ per cent. The net teaching space would be of the order of 190,000 to 225,000 square feet.

With rolls of less than these numbers teaching could be developed on the upper site in permanent buildings towards the eastern boundary and adjacent to Laucala Bay Road. There is insufficient existing building area on the upper area for teaching purposes other than for a small first and second year intake.

The above area could probably provide about 70,000 to 80,000 gross square feet with a small amount of earth moving. Such area is probably not required for 250 students. This could possibly be as low as 50,000 square feet. Generally I would regard new permanent construction as desirable at about three floors in height and mainly one room wide with wide verandahs on one side. They should be oriented with their length roughly north and south so as to take maximum advantage of the wind. Use could be made of partially open ground floor for shelter and to allow passage of the breeze. The term permanent is used to denote concrete or concrete block. No other material should be considered in this climate. However should multi-storey not be acceptable more land would have to be obtained or the lower area used for teaching facilities.

6. *Recreation.* It is assumed that Buckhurst Park will be available for recreational area. Should this not be so, in the case of the small school some other arrangement must be made as there would be no suitable land on the present site.

In the case of the larger unit some area would be available in the vicinity of Laucala Bay Road and on the eastern boundary. Earth moving would be required.

7. *Building Costs.* The cost of building in Suva appears to be not much different to New Zealand. Labour is cheap but less efficient, materials are somewhat more expensive.

It is probable that single storey permanent materials buildings will cost up to £4 per square foot and multi-storey about £6 to £7 per square foot dependent upon quality.

On the basis of the major development set out above (1,200+ students).

	£
(1) Additional hostels would cost about	650,000
(2) A new refectory block would cost about	80,000
(3) New teaching facilities would cost about	1,500,000
(4) Student Union would cost about	100,000
(5) Roading and other site works would cost about ...	50,000
(6) Services would cost about	25,000
	£2,405,000

To the above would need to be added the cost of conversion of the existing buildings plus other final demolition costs. It is very difficult to place a figure on this but it is likely that

	£
(1) Temporary conversion would cost about	80,000
(2) Demolition cost may be covered by salvage value in the case of wooden buildings but for concrete ones allow ...	7,500
Total:	£87,500

An overall figure of £2,500,000 should be considered as the likely order of cost to establish the building.

The 250 student college would involve

	£
(1) New teaching building at a cost of about	400,000
(2) Temporary conversion of existing buildings say ...	7,500
(3) New refectory, hall etc.	60,000
	£467,500

The figures are tentative only and must be reviewed in the light of a precise proposal.

8. *Site Levelling*. It is probable that if pressures warranted it major earthworks could be undertaken and areas now difficult to deal with could be developed. It is simply a matter of cost. I have undertaken no research into the likely yield in terms of student places. This exercise calls for considerably more data than at present available.

(F) Development outside Present Area

Should it be considered desirable further land could be obtained. There are at least two possibilities.

1. An area between the upper area and Sukuna Road now held I understand by Fiji Military Forces (see Appendix 6C). It consists of about 20 acres running up to and on the top of the main ridge. It is heavily overgrown and has very broken contours. Additional houses and hostels could be developed in this area.

There is a low fairly level area probably sufficient for a sports ground. It is completely surrounded by ridges and could be developed with natural spectator terraces. Without a contour plan available and because of the heavy bush it is difficult to assess its potential in terms of student hostel places but at a guess I would suggest perhaps as many as 200–250 in multi-storey units. In addition it is possible that sites might be found for 8 or 10 houses.

2. The area between Buckhurst Park and the upper site continuing down to Queen Elizabeth Drive behind the park could be developed for further academic area. This may involve displacement of the present school. In all it is possible that additional land amounting to about another 20 acres could be detained. This land is low and I am informed damp in the wet season. However filling could be obtained from work in the hostel area and even one foot of spoil over this area would improve it considerably.

Originally the land now occupied by what I have designated as the lower area was an island outcrop of soapstone and a mangrove swamp extended between it and the upper area. Evidence of this is to be seen both to the north and south of it.

It is probable that the soapstone layer dips sharply towards this area and foundations may have to go fairly deep. However this is not a serious technical problem. It is mostly a question of additional cost. This area could be developed either as wholly academic or partly academic and partly residential. Generally it is not favoured as residential as it will not benefit from the prevailing wind as well as areas on the hill. For academic purposes it could possibly yield another 250,000 gross square feet of building. Together with that on the lower area this would mean about 2,000–2,500 students depending on the nature of the spaces required.

If some residential accommodation were placed in this area there would of course be a corresponding reduction in academic area. In any case in an institution of this size it is probable that quite a number of students would live out.

3. Additional land up to a total of approximately 250 acres is available in the area. Most of this lies to the South of Laucala Bay Road but about 28 acres is north of the road and adjacent to the lower area.

Some of this land is rather wet but two or three feet of filling plus some drainage would make it usable.

I understand that all of this land is held by the Crown but that some of it is on lease. The only lease, so far as I know, that is likely to cause any real difficulty is that on the Buckhurst Park athletic ground being a 99 year lease. No doubt some agreement could be reached with the Athletic Association over its use for student recreation. This area of 250 acres would easily provide for 3,500 students residential, recreational and educational facilities. With an increase in building height above the three or four floors previously quoted and as discussed it is probable that a total of 5,000 students could be provided for though I have doubts as to the wisdom of significant increase in height with its consequent problem of cutting off the breeze from other buildings in the lee of the higher ones.

Note : A study of New Zealand Universities indicates that for all faculties plus service buildings such as Administration and Student Union a suitable gross area of building per student for Fijian conditions should be not less than 185 square feet.

Residential buildings will probably require anything up to 250 gross square feet per residential student in addition, dependent on standards required and extent of area for wardens, common spaces etc.

(G) **Summary.**

A medium-sized college can be organised on the site as it stands with the proviso that tuition buildings will require a considerable expenditure on maintenance and should be regarded as expendable within about ten years.

With major rebuilding of teaching buildings a college of about 1,000 or slightly more should be possible.

With a major rebuilding of hostels and additional hostels this figure could reach 1,500. If further land as set out above were obtained the residential area could possibly provide for 1,700–1,800 living-in students, some staff and an academic area for up to possibly 2,500.

I wish to express my gratitude to all who have helped to make this report possible and in particular to the R.N.Z.A.F. personnel of the base, the Fiji Government Architect, Mr. Graham, M.O.W. Overseer at Laucala Bay and Members of the Mission on Higher Education.

R. M. Abel,
Sectional Architect, Ministry of Works,
New Zealand.

APPENDIX 6A

USABLE BUILDINGS

(Other than residential)

Building Number	Material	Gross Area	Inside Width		Remarks
			ft.	in.	
Location Area 2					
T92	Wood	288	12	0	Storage—minor teaching.
T137	Wood	1,408	21	6	Teaching—partitioning would need alteration.
T136	Wood	1,630	23	6	
Location Area 3					
T59	Wood	1,850	28	6	Lectures, Seminars.
T82	Wood	290	12	0	Storage.
T178/142	Wood	2,636	Varies		Lectures, Seminars, plus offices.
Location Area 4					
T1	Wood	2,420	Varies		Administration.
T24	Wood	2,577	28	0	Storage.
T43	Wood	775	24	0	Teaching.
T55	Wood	each 297	12	0	Storage.
T95					
T96					
T60	Wood	940	21	6	Chapel.
T131	Wood	6,193	29	4	Refectory.
T133	Wood	465	12	6	Teaching.
Location Area 5					
T71	Wood	3,103	21	6	Student Club.
T72 and 76	Wood	each 940	21	6	Technical teaching.
T75/141	Wood	1,492	21	6	Technical teaching.
T38	Wood	534	11	6	Seminar.
T26	Wood	924	21	6	Technical teaching.
Location Area 6					
T139	Wood	2,500	21	6	Lectures, technical teaching.
T140	Wood	930	21	6	Lectures, technical teaching.
T145	Wood	1,989	17	6	Will probably be retained by RNZAF.
T147	Wood	300	11	6	
T150	Wood	1,069	13	6	
Location Area 7					
T130	Wood	7,706	Varies		Refectory, student club or similar.
Location Area 12					
1	Concrete	1,100	31	6	Small rooms. Special purpose.
41	Concrete	2,909	20	0	Offices or seminars.
40	Concrete	1,072	24	0	Teaching.
T22/23	Wood	5,620	25	6	Lectures, labs.
T25	Wood	4,125	40	6	Large lectures, or sub-divide for general teaching.
T28	Wood	1,806	20	6	Practical rooms, lectures, teaching.
T42	Wood	1,843	21	0	Practical rooms, lectures, teaching.
T78	Wood	940	21	6	Practical rooms, lectures, teaching.
T160	Wood	576	15	6	Special purposes or offices.
T205	Wood	324	11	6	Storage.
T220	Wood	1,380	30	0	Teaching, plus offices.
T221	Wood	432	11	6	Storage.
Location Area 13					
42	Concrete	1,597	17	6	Special teaching or staff room.
44	Concrete	3,233	24	0	Labs., workshops or lecture rooms.
T7	Wood	34,578	176	0	Offices, labs., lectures, seminars, assembly area.
T185	Wood	2,527	Varies		Workshops, labs., lectures, etc.

Building Number	Material	Gross Area	Inside Width	Remarks
Location Area 15			ft. in.	
T9	Wood	3,187	58 0	Technical Workshops.
T14	Wood	1,848	21 6	Technical Workshops.
T162/200 ...	Wood	each 303	11 6	Storage or similar.
T202	Wood	960	23 6	Lectures, seminars, etc.
T222	Wood	248	11 6	Storage and the like.
Location Area 16				
T6	Wood	2,560	Varies	Offices.
T15	Wood	4,801	37 6	Workshops only.
T16	Wood	3,980	29 6	Workshops only.
T18	Wood	3,130	21 6	Teaching purposes generally.
T84	Wood	316	12 0	Storage or similar.
T86/87 ...	Wood	1,059	21 0	Storage or similar.
T88 and 172	Wood	316	12 0	Storage or similar.
T219	Wood	966	13 6	Storage or similar.
Location Area 17				
T11	Wood	1,334	21 6	General teaching.
T29	Wood	752	24 6	General teaching.
T77	Wood	924	22 6	General teaching.
Location Area 18				
31	Concrete	1,910	24 6	Technical workshop.
32	Concrete	2,210	24 6	Technical workshop or teaching.
33	Concrete	1,890	24 6	Technical workshop.
34	Concrete	2,813	24 6	Technical workshop.
T5	Wood	2,556	25 0	Teaching and offices.
T21	Wood	2,210	25 0	Teaching, lectures, etc.
T51	Wood	408	11 6	Storage.

It should be noted that there are a large number of buildings under 200 square feet that are not listed as they are not likely to have much use. There are also some garages, open buildings and a timber store not specifically mentioned.

APPENDIX 6B

HOUSES

Location Area	Number	Bedrooms	Materials
1	8	2—4 bedrooms	Wood
		6—3 bedrooms	Wood
2	8	8—3 bedrooms	Concrete
3	2	2—3 bedrooms	Concrete
8	13	13—3 bedrooms	Concrete
9	8	8—3 bedrooms	Concrete
10	4	1—4 bedrooms	Wood
		3—3 bedrooms	Wood

Note: Area 8 may be excluded from that handed over.

APPENDIX 6C

SINGLE QUARTERS

Location Area	Number	Bedrooms	Beds/Room	Total
3	8	5	4	160
		1	1	8
4	1	6	4	24
		1	2	2
6	8	6	1	48
7	7	6	1	42
8	1	3	1	3
		1	2	2

APPENDIX 7

LIST OF DOCUMENTS, PAMPHLETS ETC. MADE AVAILABLE TO THE MISSION

Fiji

Department of Education Annual Report (1963).
Department of Education Annual Report (1964).
Development Planning in Fiji (1964).
Draft Education Development Plan 1966–70. (Education Department.)
The Fiji Estimates 1966.
Fiji School of Medicine 1965.
List of Fiji Students on Scholarships and Bursaries Overseas.
Local Scholarship Holders and Fiji Students in New Zealand.
Notes on the Proposal for the Establishment of a University College in Fiji.
Observations on Tertiary Education in Fiji.
Preliminary Survey—High Level Manpower Requirements in Fiji.
Private Students in New Zealand.
Report of the Fiscal Review Committee (1964).
Sea Farming in Fiji.

British Solomon Islands Protectorate

Careers for Solomon Islanders 1965.
Education Department Annual Report (1964).
Education Policy (1962).
Facts about the British Solomon Islands Protectorate.
Students Overseas 1965.
Technical Education in the Protectorate.
Technical Training Courses in the British Solomon Islands Protectorate and the use of a Polytechnic.
The Development of the Economy of the British Solomon Islands Protectorate.
Training Courses at T.S. "Ranadi".
Vocational Guidance Service—Vacancies in 1966.

New Hebrides

Proposed Plan for the Development of British Education in the New Hebrides (Dec. 1963).
Report on the Development of Technical Education within the British Education Service in the New Hebrides (Chadwick Rep.).

Papua–New Guinea

Administrative College of Papua–New Guinea.
A Career in Medicine.
Medical Training in New Guinea.
Prospectus—Agricultural College, Vudal.
Report of the Commission on Higher Education in Papua–New Guinea.
Territory of New Guinea—Report for 1963–64.
Territory of Papua—Report for 1963–64.

Western Samoa

Annual Report of Education Department 1963.
Annual Report of Education Department 1964.
Education Mission—Proposed Regional College(s) for Higher Education—Laucala Bay.
Proposals for Future use of Laucala Bay Base—for Higher Education.
Regional University College and Institute of Education for South West Pacific.
Samoa College Magazine 1965.

Tonga

Report by Miss Gwilliam—Education in Tonga.
Department of Education: Annual Report For 1963.

Gilbert and Ellice Islands Colony

Annual Summary on the Progress of Education 1964.
Proposals for Educational Development in the Gilbert and Ellice Islands.
Summary of Higher Education Requirements.
Survey of Education for the 3 years ended 31st December 1963.

East-West Center, University of Hawaii

Facts about the East-West Center.
Fourth Annual Report.
The Institute for Student Interchange Catalog—1966.
Institute for Student Interchange Policy Handbook 1965.

University of Hawaii

An Academic Development Plan (January 1964).
Campus Guide.
Curriculum Development for Hawaii's Community Colleges with emphasis on Occupational Education.
Enrolment of EWC(ISI) and Non-EWC Students from Pacific Islands at the University of Hawaii.
Feasibility of Community Colleges in Hawaii.
General Catalogue 1965–66.
Hawaii—Plans for Community Colleges.
Oceanography at the University of Hawaii.
Research at the University of Hawaii.
The President's Report for the Fiscal Year Ending 30th June 1965.

Technical Brochures

Auckland Technical Institute (1965)

Courses for Technicians Handbook (New Zealand) (1965)

Department of Technical Education Handbook—New South Wales (1965)

Derrick Technical Institute Prospectus 1965

Technical Correspondence Institute (New Zealand) Prospectus 1965

Training Opportunities—Hawaii's Technical Schools

The New South Wales Institute of Technology (1965)

Technical Education in the Junior College—New Programme for New Jobs

Miscellaneous

Brief Notes on the Population and Economies of Selected South Pacific Island Territories

Report to the Council for Technical Education and Training for Overseas Countries—Post-School Education and Training in the South Pacific (Nov. 1965)

Second Regional Education Seminar for the South Pacific—Report and Recommendations (24th August—3rd September 1964)

Summer Conference on Training for Development (26th August—8th September 1962) (Cambridge University Overseas Studies Committee)

Reports on the Cook, Niue and Tokelau Islands

Report of the Department of Island Territories for year ended 31st March 1965

Digest of Statistics—No. 57 August 1965.

Report on Teacher Training Needs in South Pacific Countries (Box Report)

Report on the Development of a University in Northern Rhodesia (1963)

South Pacific Commission Report of Proceedings of 27th Session (Lae, 17th July 1965)

Reports of Visits to the Pacific by Miss Gwilliam, Women's Education Adviser, O.D.M.; and Mr. Kenneth Marshall, T.E.T.O.C.

Pacific Islands Monthly (November 1965)

South Pacific Bulletin (October 1965)

South Pacific Programme II June 1965 (University of Auckland)

The Development of a University College of Mauritius—(Sessional Paper No. 4 of 1964)

The Journal of Modern African Studies

The Requirements and Supplies of High Level Manpower in Northern Rhodesia 1961–70

Further Education B.B.C.

Outlook—1965–66 B.B.C. Annual Programme of Educational Courses for Adults

Manpower Planning in Developing Countries

New Zealand Teacher Training for Islands 1965–66 and University, Secondary and Primary Students in New Zealand.

(83927) Dd. 127115 K16 4/66 St.S.